

1 **LONDONDERRY, NH MASTER PLAN STEERING COMMITTEE MINUTES OF THE**
2 **JULY 25, 2012 MEETING IN THE MOOSE HILL COUNCIL CHAMBERS**

3
4 Members Present: Leitha Reilly, Chair and Planning Board Representative; Marty
5 Srugis, Vice Chair and Heritage Commission Representative; Joe Green, Town
6 Council Representative; Lisa Whittemore, Budget Committee Representative; Larry
7 O'Sullivan, Zoning Board of Adjustment Representative; Mike Speltz, Conservation
8 Commission Representative; Mary Soares, Planning Board Alternate
9 Representative; Bob Saur, Londonderry Trailways Representative; Deb Paul,
10 Business Community Representative; Mary Tetreau, At Large Representative
11 (North); and Russ Lagueux, At Large Representative (South)

12
13 Also Present: Community Development Director André Garron, AICP; GIS Manager
14 John Vogl; Community Development Secretary Jaye Trottier, and (via Skype) Brian
15 Wright and (by phone) Matt Noonkester of the consultant firm Town Planning and
16 Urban Design Collaborative (TPUDC).

17
18 **I. Call to Order**

19
20 Leitha Reilly called the meeting to order at 7:01 PM.

21
22 **II. Approval of Minutes – June 27, 2012**

23
24 **M. Srugis made a motion to approve and sign the minutes from the**
25 **June 27, 2012 meeting. J. Green seconded the motion.** No discussion.
26 **Vote on the motion: 6-0-4.** (B. Saur, M. Soares, R. Lagueux, and L.
27 O'Sullivan abstained as they were absent from the meeting).

28
29 **III. Acceptance of the UNH Phone Survey**

30
31 [L. Whittemore arrived during this discussion at 7:04]

32
33 L. Reilly explained that at the June 27 meeting, concerns were expressed over
34 whether the UNH Survey Center had culled enough quantifiable data from the
35 open ended questions of the phone survey. L. Reilly subsequently met with
36 staff and after reviewing the report in more detail, it was concluded there was
37 a sufficient amount of quantifiable information. Committee members were
38 informed of this by email shortly thereafter. L. Reilly reported that she did not
39 receive any objections to that conclusion. She added that the contract with
40 the UNH Survey Center was also reassessed. The determination was made
41 that it had been fulfilled and therefore any additional request for information
42 would constitute a change in scope. To ensure that the survey data is
43 accurately reflected in the Master Plan document, B. Saur suggested
44 Committee members review the responses to the open ended questions before
45 reading the Master Plan draft in detail and add any data they feel has been
46 overlooked.

47
48 **M. Soares made a motion to adopt the UNH phone survey. L.**
49 **Whittemore seconded.**

51 D. Paul stated that she found the presentation of the survey analysis to be
52 lacking, that better summarization would make it more useful and accessible
53 to the reader. M. Speltz suggested TPUDC add a brief infographic
54 representation to the Master Plan of UNH's narrative conclusions. M. Srugis
55 questioned the need to delve more deeply into the survey analysis when the
56 Steering Committee should now be focusing on the overall plan. In his
57 opinion, the survey should be regarded as a single tool that can be combined
58 with Planapalooza input. Rather than combining input from survey
59 respondents with what TPUDC amassed during Planapalooza, M. Speltz
60 proposed that the two should stand as independent tools since their methods
61 of solicitation were so different. While the results of each may be very similar,
62 he cited the careful crafting of the survey questions by the survey
63 subcommittee and offered that the two data sets could add more credibility to
64 the overall plan if identified separately. B. Saur suggested that instead of
65 infographic form, the results could be added to the various "What We Heard"
66 sections within the document if they are not already there. D. Paul and L.
67 Whittemore each restated the amount of effort put into the survey questions
68 and the need to make sure those responses are captured in a way that will
69 engage the reader. J. Green confirmed with B. Wright that TPUDC believed
70 the survey data was adequately reflected in the first draft. B. Wright also
71 cautioned that the "scientific" quality of the phone survey can be overstated
72 since limitations built into its process (e.g. the sole use of landlines and the
73 age demographic of those who opted to respond) skew the results. B. Saur
74 noted that the Planapalooza results are just as skewed because the input is
75 coming solely from those who chose to participate. In either case, B. Saur
76 continued, the results represent specific subsets of the community and are
77 independently valid. L. Reilly noted that MPSC members represent two further
78 subsets of the population; those on their own Board and Commissions, and
79 those members of the public who have given their input to them personally
80 since the process began a year ago. **L. Reilly called for a vote on the**
81 **motion. Vote on the motion: 11-0-0.**

82
83 It was also decided that a subcommittee would be formed to compose more
84 comprehensive conclusions from the open ended questions and determine the
85 most effective way of presenting them. L. Reilly, M. Speltz D. Paul, and B.
86 Saur volunteered to confer with staff immediately following this meeting. To
87 stay within the confines of the set schedule, there was further consensus that
88 the subcommittee's output would be added directly to the draft along with all
89 the other general comments due to staff by August 10 (see Attachment #1 for
90 entire schedule).

91
92 **IV. Review of Master Plan 1st Draft**

93
94 L. Reilly asked that Committee members limit their comments at this meeting
95 to their observations about the overall plan and its primary concepts as
96 opposed to noting such specifics as typographical errors and other details.
97 Members will have the opportunity to relay any and all other comments to staff
98 by August 3 in any format they choose. Staff will then synthesize the input
99 and deliver it to TPUDC on August 10. Those comments, B. Wright requested,
100 should be as detailed as possible to clarify exactly what the reader likes or

101 dislikes and should include any suggestions of how they should be changed.
102 He also noted that while implementation is discussed at various points
103 throughout the document, TPUDC will be crafting a more comprehensive
104 matrix in future drafts. The Tool Kit section will also be revised to make it
105 more specific to Londonderry and the various tools will eventually be tied to
106 specific concepts found later on in the document. Feedback from the Steering
107 Committee will help TPUDC to do the latter by discerning which tools are
108 believed to be the most applicable and useful.

109
110 Comments from members, the Chairman of the Planning Board, and staff were
111 as follows:

- 112
113 1. Leitha Reilly;
- 114
- 115 a. The plan should incorporate more information regarding a **water**
116 **resources management plan**, perhaps with some examples TPUDC
117 has encountered in other parts of the country, along with guidance for
118 its implementation.
- 119
- 120 b. TPUDC has demonstrated a great knowledge of the different types
121 of businesses and revenue streams in Londonderry and how they
122 impact quality of life for residents. For implementation purposes,
123 however, more guidance related to those **economic impact issues**
124 would be helpful.
- 125
- 126 c. Edification for the layperson about current **zoning laws** and the
127 potential use of **form based code** is needed to explain and how and
128 why concepts resulting from Planapalooza would require changes in
129 the ordinance. This will guide the associated implementation as well.

- 130
131 2. Art Rugg, Planning Board Chair (via email);
- 132
- 133 a. The "**Brief History of Londonderry**" by former Town Historian
134 Marilyn Ham that was included in the 2004 Master Plan should be
135 incorporated into this update.
- 136
- 137 b. **Historical preservation** and how it maintains the Town's identity
138 and character should be included.
- 139
- 140 c. Strong promotion of **local agricultural** should be used, especially
141 since it is a critical part of the Town's Open Space Plan, as well as
142 community character and "staying green."

- 143
144 3. Russ Lagueux;
- 145
- 146 R. Lagueux stated that his overview comments had already been
147 covered during the evening's discussion.
- 148

- 149 4. Mike Speltz;
- 150

- 151 a. The **Water Resources Management Plan** should have at least
152 as much detail as the other town services in the plan. What the Town
153 has now, threats, future requirements, and how those needs will be
154 met should all be addressed.
155
156 b. It should be noted that some of the **goals** in the plan may take
157 longer than 10 years to accomplish. Ambitions should not be excluded
158 just because they appear more complex.
159
160 c. Providing the consideration of two **alternate futures** is a great
161 idea, however, additional indicators of the different results are needed
162 to reinforce the point. (M. Noonkester replied that that the necessary
163 software has been created to address this).
164
165 d. Will there be a **bibliography** or imbedded **references** to explain
166 such concepts as form based code to residents? (M. Tetreau offered to
167 generate a glossary for TPUDC to fact check).
168

169 5. Marty Srugis;

- 170
171 a. The concept of the various **villages** (e.g. Pettengill Road Industrial
172 Village, North Village Artisan District, etc) is a good one. It should be
173 addressed, however, whether the existing narrow roads will be
174 sufficient if some or all are of the villages are built while the remaining
175 2,000 one-acre lots in town are developed as well.
176

177 6. Joe Green;

- 178
179 a. **Implementation steps** will need to be added.
180
181 b. The **photos** related to the future possibilities need to be more
182 relevant to Londonderry and its realistic future (e.g. p. 137, the photo
183 includes an MBTA station, something which could only be a reality in
184 Londonderry's very distant future. B. Saur suggested using the image
185 of a Park and Ride there instead).
186
187 c. Although TPUDC has stated that the **artist's renderings** cannot be
188 altered unless they contain an overwhelming error, care should still be
189 taken to ensure such items as cemeteries and churches are not
190 relocated in those images. (B. Wright responded that he felt confident
191 they were not).
192

193 7. Bob Saur;

- 194
195 a. More **photos** of Londonderry should be used in place of some of the
196 generic photos and some already in the draft need to be modified, e.g.
197 p. 47 where the entire picture of the trail sign should be included.
198
199 b. Some **illustrations** should be adapted to make them more specific
200 to Londonderry. For example, rather than using generic depictions of

201 bike lanes on pp. 133-135, they should demonstrate how they would
202 look in specific areas in town. (B. Wright explained that while the text
203 within the Took Kit section is tied expressly to Londonderry and *photos*
204 should represent what is realistically possible, diagrams like those are
205 intended to be generic to show their applicability throughout the town
206 and not just in a particular area).

207
208 c. Even if the various **villages** are not desirable to people as they are
209 described (e.g. residents may agree not to recreate the North Village
210 into an artisan area), some of the concepts such as traffic can still be
211 very useful to a given sector of town.

212
213 d. **Politically charged ideas** should be avoided, e.g. that the town
214 'does not want to fund a certain project but is not opposed to getting it
215 for free' since grants typically include some kind of match on the part
216 of the applicant. In this example, it could be stated instead that the
217 town in seeking a public/private partnership for a given development.

218
219 8. Larry O'Sullivan;

220
221 a. The concept of **centers and corridors** aids in forming a picture of
222 future development and its infrastructure in the areas where nothing
223 currently exists. More description, however, about centers and
224 corridors would be useful, along with plans for their implementation.

225
226 b. **Character zones** could be a good addition to the zoning
227 regulations as long as they are kept separate from the exclusionary
228 parts of the ordinance. Providing examples would also be helpful.

229
230 c. More explanation regarding **form based code** is needed. Unless
231 what exists today and what is to be developed are distinguished in
232 the Master Plan, coordination between uses could be very
233 complicated. Significant changes to the zoning ordinance will be
234 required which could produce conflicts with State RSAs. (B. Wright
235 explained that the master plan is designed to integrate with form
236 based code should the town decided to use it. He directed the
237 Committee to the Conservation and Growth Map, p. 142).

238
239 d. What will the town need to require of developers for the various
240 **villages** and how can those developers contribute to the
241 **development rights** of existing land that they are not using?

242
243 e. The proposed villages are a good way to differentiate the sections
244 within town.

245
246 9. Mary Soares;

247
248 a. Relative to Londonderry, **the word "city"** should be replaced with
249 "town." Even in general, the word "community" is preferable to "city."

250

251 b. More **local photographs** are needed in place others already in the
252 plan.

253
254 10. Lisa Whittmore;

255
256 a. Specific recommendations are needed for **protection of water**
257 **resources**. The Open Space Task Force report revealed a high level
258 of interest in protecting the aquifers in town and the town is at a
259 critical stage in development where residents have to choose whether
260 to address the issue or not.

261
262 b. **Form based code** would be required for much of the development
263 included in the plan. The document should provide more guidance on
264 how the town would transform to its use and away from current
265 zoning. (B. Wright explained that the use of the concept was
266 purposefully limited so it did not appear it was being forced upon the
267 reader. Instead, TPUDC wanted to demonstrate there is a need for
268 form based code if the town chooses to adopt some of the ideas in the
269 plan. The implementation issue will be addressed at a later date).

270
271 c. More **local photographs** are needed.

272
273 11. Mary Tetreau;

274
275 M. Tetreau expressed her appreciation for the work put into the first
276 draft and the resulting product, noting it provides a great starting
277 point.

278
279 12. Deb Paul;

280
281 a. The **artist's renderings** (e.g. pp 166-167) have confused some
282 residents who questioned if these were actual plans. The text uses the
283 word "proposed," but they represent situations that cannot happen.
284 (It was discussed that the word "conceptual" should be used in place
285 of "proposed" since the renderings reflect only *potential* future
286 changes. B. Wright added that unlike other drawings and illustrations,
287 an tremendous error would have to be identified to warrant a change
288 in the renderings. D. Paul suggested showing a picture of the same
289 area as it exists today and to mark the streets and/or landmarks. B.
290 Wright noted that a better key map might solve the issues of
291 perspective. B. Saur recommended using a layout like that used in the
292 separate villages to identify specific concepts and locate them on the
293 map, e.g. pp. 172-173).

294
295 13. André Garron;

296
297 a. It would be useful to have more coordination between **community**
298 **facilities/services** and **infrastructure**, especially regarding public
299 works, electric, and natural gas.

300

301 b. It needs to be estimated what infrastructure will be needed for each
 302 of the **villages**. It should also be ensured that whatever is needed to
 303 improve in the town’s transportation system matches the vision of the
 304 plan.

305
 306 c. While it is inspirational to have so many new concepts presented, it
 307 is also important not to lose the **character of the town** that has been
 308 identified by residents continuously through the process.
 309

310 In addition to each Committee member reviewing the document in its entirety,
 311 members volunteered to examine in greater detail specific sections within the
 312 table of contents:
 313

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315 **V. Next Steps**

316
317
318

L. Reilly reviewed the schedule through August and into September:

Comments from MPSC to staff	Due August 3 rd
Synthesized comments from staff to TPUDC	Due August 10 th
2 nd Draft of Master Plan	Due September 7 th
MPSC Meeting	August 2 nd - Moose Hill Council Chambers
MPSC Meeting	August 22 nd - CANCELLED
MPSC Meeting	September 26 th - Moose Hill Council Chambers
Subsequent monthly MPSC meetings	Every 4 th Weds- Moose Hill Council Chambers

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320

VI. Other Business

321
322
323

There was no other business.

324 **VII. Adjournment**

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326
327

L. O'Sullivan made a motion to adjourn the meeting. J. Green seconded the motion. Vote on the motion: 11-0-0.

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329
330

The meeting adjourned at 9:25 PM.

331
332
333

Respectfully submitted,

334
335
336

Jaye Trottier, Community Development Secretary

2012 MASTER PLAN SCHEDULE JULY - DECEMBER

DATE	ITEM	BY	ACTION	MTG./WORKSHOP
7.18	Draft Master Plan to Steering Committee	TPUDC	Deliverable	
7.18 - 7.25	Steering Committee Review of 1st Draft	S.C.	Questions/Comments	
7.25	Steering Committee Meeting	S.C.	Discussion	TPUDC Call In
7.26 - 8.10	Synthesis of 1st Draft Comments	Staff	Package for Consultant	
8.10.12	Comments on 1st Draft to TPUDC	Staff	Send to TPUDC	
8.10 - 9.7	TPUDC to Prepare Interim Draft	TPUDC	Incorporate Comments	
8.2.12	Steering Committee Meeting	S.C.	Discussion	TPUDC Call In
8.22	Steering Committee Meeting Cancelled			
9.7	Interim Master Plan Draft to Steering Committee	TPUDC	Deliverable	
9.7 - 9.21	Steering Committee Review of Interim Draft	S.C.	Questions/Comments	
9.12	Policy Maker Briefing - Joint Planning Board/Town Council	TPUDC	Presentation to Boards	PM Briefing #2
9.21	Steering Committee Comments to Staff	S.C.	Final Comments to Staff	
9.26	Steering Committee Meeting	S.C.	Discussion	TPUDC Call In
9.27 - 10.5	Comments on Interim Draft to TPUDC	Staff	Send to TPUDC	
10.5 - 11.9	TPUDC to Prepare Final Draft	TPUDC	Incorporate Comments	
10.24	Citizen Workshop #3 (6:00 PM)	TPUDC	Public Workshop	Citizen Workshop #3
10.24	Steering Committee Meeting - Final Edits (7:30 PM)	S.C.	Discussion w/TPUDC	Client Mtg. #4
11.9	Final Master Plan - Submit to Town	TPUDC	Deliverable	
11.14	TPUDC Presentation to Planning Board	TPUDC	Presentation to Boards	PM Briefing #3
11.14	Master Plan Public Hearing	PB	Public Hearing per RSA	Planning Board
11.28	Steering Committee Meeting	S.C.	Wrap-up w/ TPUDC	Client Mtg. #5
12.5	Tentative Planning Board Adoption of Master Plan	PB		Planning Board

Town of
Londonderry, New Hampshire



DISCUSSION DRAFT
Version 1.0 | July 19, 2012

Comprehensive Master Plan

2012

VISION STATEMENT

LONDONDERRY SHOULD REMAIN A SMALL, VIBRANT COMMUNITY IN THE HEART OF NEW HAMPSHIRE, DEDICATED TO PROMOTING FAMILY VALUES AND PROVIDING ITS RESIDENTS WITH EXCELLENT EDUCATION AND EFFICIENT TOWN SERVICES.

Londonderry is a close-knit, vibrant community, set in a landscape of protected forests and farms, that provides its residents, families and businesses with efficient services, inviting public spaces, a top-tier school system, and diverse options for housing, recreation, and transportation.

These qualities attract knowledge-oriented businesses drawn to Londonderry's educated work force, access to commercial transport, and superior quality of life.



DISCUSSION DRAFT

ACKNOWLEDGEMENTS

Planning Board

ARTHUR RUGG, CHAIR
MARY WING SOARES, VICE CHAIR
LYNN WYLES, SECRETARY
LAURA EL-AZEM ASSISTANT SECRETARY
CHRIS DAVIES
DANA COONS
RICK BRIDEAU EX-OFFICIO ADMIN. EMPLOYEE
JOHN LAFERRIERE, SCHOOL BOARD LIASON
TOM FRED A, TOWN COUNCIL LIASON
SCOTT BENSON, ALTERNATE
LEITHA REILLY, ALTERNATE
MARIA NEWMANN, ALTERNATE

Town Council

JOHN FARRELL, CHAIR
TOM DOLAN, VICE CHAIR
JOE GREEN
JIM BUTLER
TOM FRED A

Acting Town Manager

WILLIAM R. HART, JR., POLICE CHIEF, ACTING TOWN MANAGER

Former Town Manager

DAVID CARON

Planapalooza Acknowledgements

BLACKBERRIES BAKERY
CONTINENTAL PAVING
JACK FALVEY
LEACH LIBRARY
LET'S PLAY MUSIC
LONDONDERRY ATHLETIC FIELD ASSOCIATION (Lafa)
LONDONDERRY COMMERCE & VISITORS CENTER
LONDONDERRY FIRE DEPARTMENT
LONDONDERRY HIGH SCHOOL CUSTODIAL SERVICES
LONDONDERRY LIONS CLUB
LONDONDERRY MIDDLE SCHOOL LIBRARY
LONDONDERRY PLANNING BOARD
LONDONDERRY PUBLIC WORKS DEPARTMENT
LONDONDERRY SCHOOL DISTRICT FOOD SERVICES
LONDONDERRY SCHOOL DISTRICT, ADMINISTRATION & TEACHERS
LONDONDERRY YMCA
LONDONDERRY YOUTH SOCCER ASSOCIATION (LYSA)
LONDONDERRYNH.NET
MACK'S APPLES
NUTFIELD PUBLISHING/LONDONDERRY TIMES
STONEFIELD FARM
TOWNUPDATE.COM

2012 Master Plan Steering Committee

LEITHA REILLY, CHAIR
MARTIN SRUGIS, VICE-CHAIR
MARY WING SOARES, PLANNING BOARD ALTERNATE
JOE GREEN, TOWN COUNCIL
JOHN LAFERRIERE, SCHOOL BOARD
LISA WHITTEMORE, BUDGET COMMITTEE
LARRY O'SULLIVAN, ZONING BOARD
MIKE SPELTZ, CONSERVATION COMMISSION
DEB LIEVENS, CONSERVATION COMMISSION ALTERNATE
JASON ALLEN, HOUSING REDEVELOPMENT AUTHORITY
BOB SAUR, LONDONDERRY TRAILWAYS
DEB PAUL, BUSINESS COMMUNITY REPRESENTATIVE
MARY TETREAU, AT-LARGE REP. (NORTH)
BARBARA MEE, AT-LARGE REP. (CENTRAL)
RUSS LAGUEUX, AT-LARGE REP. (SOUTH)

Community Development Department Staff

ANDRE GARRON, AICP, DIRECTOR OF COMMUNITY DEVELOPMENT
CYNTHIA MAY, ASLA, TOWN PLANNER
JOHN VOGL, GIS MANAGER/PLANNER
JAYE TROTTIER, COMMUNITY DEVELOPMENT SECRETARY
LIBBY CANUEL, BUILDING SECRETARY

Town Staff

MARGO LAPIETRO, EXECUTIVE ASSISTANT TO THE TOWN MANAGER
STEVE COTTON, ADMIN. SUPPORT COORDINATOR
RICHARD CANUEL, SENIOR BUILDING INSPECTOR/HEALTH/ZONING OFFICER
KEVIN BARBOSA, INFORMATION TECHNOLOGY COORDINATOR
JANUSZ CZYZOWSKI, DIRECTOR OF PUBLIC WORKS AND ENGINEERING
JOHN TROTTIER, ASSISTANT DIRECTOR OF PUBLIC WORKS AND ENGINEERING
ROBERT KERRY, ENVIRONMENTAL ENGINEER
DONNA LIMOLI, DPW&E ADMINISTRATIVE ASSISTANT
KAREN MARCHANT, ASSESSOR
RICK BRIDEAU, ASSISTANT ASSESSOR
DREW CARON, LONDONDERRY CABLE ACCESS DIRECTOR
KEVIN MACCAFFRIE, FIRE CHIEF
BRIAN JOHNSON, FIRE MARSHALL
KIMBERLY BEAN, SENIOR AFFAIRS COORDINATOR
BARBARA J. OSTERTAG-HOLTKAMP, LEACH LIBRARY DIRECTOR

School Department Staff

NATHAN S. GREENBERG, SUPERINTENDENT OF SCHOOLS
PETER CURRO, BUSINESS ADMINISTRATOR
CINDY ALLEY, BUSINESS OFFICE ASSISTANT
NANCY FAUCON, FOOD SERVICES COORDINATOR

Consultants

TOWN PLANNING & URBAN DESIGN COLLABORATIVE

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PETTINGILL RAOD INDUSTRIAL VILLAGE
TOWN CENTER: RECREATIONAL VILLAGE
TOWN CENTER: THE COMMON
NORTH VILLAGE ARTISAN DISTRICT
SOUTH VILLAGE SUBURBAN RETROFIT

Community Facilities & Services

TRANSPORTATION
WATER & SEWER SERVICE
GREEN PRINT INITIATIVE
POLICE & FIRE PROTECTION
SCHOOL SYSTEM
TELEPHONE
ELECTRIC

Driving Success

SETTING TARGETS
PROJECTS, PLAN, POLICIES, & INITIATIVES
PLAN IMPLEMENTATION MATRIX
RESOURCE ALLOCATION
COMMUNITY REPORT CARD



introduction

In 2011, Town officials kicked off ‘Get It Right’ Londonderry, a community-wide initiative to update the Town’s comprehensive master plan. It represents the official blueprint for long-term, responsible growth in the Town, supported by a grassroots initiative to include residents, business owners, property owners, local interest groups, and elected officials throughout the planning process.

Building on past planning efforts, the comprehensive master plan seeks to implement a vision that preserves the character of Londonderry, still perceived as a rural community, while addressing growth in a more explicit way that continues to provide a high quality-of-life for all residents. Patience may be needed for many aspects of the plan, as it sets a long-term vision to guide growth over time.

This vision focuses on sustainable development — measured by environmental stewardship, economic prosperity, and an equitable distribution of community resources — that reflects the community’s unique character and local values. Commitment to sustainable development will be tested in the coming years, as population grows. The comprehensive master plan document provides a policy framework and illustrative plans from which the zoning ordinance, subdivision ordinance, capital improvements plan, and annual budget are amended. It also supports the Town’s administration of development impact fees, helps manage municipal service areas, and influences other planning documents. It should be used by elected officials and appointed board members to evaluate development applications, amend ordinances, and plan future expenditures. Together, the plan and its implementing tools ensure future development decision-making

is consistent with the community’s vision and residents’ expectations for a higher quality-of-life. Ultimately, the plan’s relevance will be measured by its use during everyday decision-making.

Monitoring the plan’s implementation should be an open and on-going process, summarized each year in a community report card that examines performance, measures achievement, and reflects change generated by the comprehensive master plan.

WHAT IS THE LONDONDERRY COMPREHENSIVE MASTER PLAN?

The comprehensive master plan is the official adopted statement for future development and conservation in the Town. It establishes a vision and guiding principles; analyzes existing conditions and emerging trends; describes and illustrates a plan for future development and supporting infrastructure; provides the town with a toolbox for sustainable growth; and outlines steps for plan implementation. The long-term horizon for the plan keeps the document somewhat general; however, the broad range of development issues and town services addressed makes it a true blueprint for smart, sustainable growth. Data was collected and reported for the town consistent with the intent of rules and requirements set forth in RSA 674:2 for developing a comprehensive master plan.

Why Plan?

The citizens of Londonderry, New Hampshire, value its rural character and small town charm. A great school system and many recreation and sporting opportunities significantly contribute to the quality of life enjoyed by current residents. Additionally, residents and visitors from around New England enjoy the luxuries of Londonderry's expansive natural areas, trail systems, and apple orchards.

Despite all of these amenities, Londonderry is facing some challenges going forward. Demographic data shows that Londonderry's population is disproportionately composed of seniors and elderly citizens. While people in this age cohort have much to offer the community in the way of experience and wisdom, an imbalance of any kind begins the trend towards a monoculture, which is inherently unsustainable. Not only is the population of Londonderry aging but there is an abnormally large gap in the population from the ages of 20 to 34. Unfortunately, this is the demographic that tends to be most likely to volunteer and to engage in civic life, have the entrepreneurial spirit necessary to start new businesses, and the creativity to innovate.

As a result of the aging population, school enrollment is down and there is a growing lack of desire to invest in the schools since the vast majority of residents don't have school age

children. In Londonderry, this is particularly problematic because the superior education and activities offered by the schools is the number one reason that people move to Londonderry. Many residents interviewed during Planapalooza overcame misgivings about the physical form of the town because enrolling their children in the Londonderry school system was more important to them. This is evidenced by the number of real estate signs that pop up in front yards around Town at high school graduation time.

The previous Master Plan is now 10 years old. As with many of the documents written prior to the great recession of 2007, this last plan could not have anticipated the financial hardships and resulting lifestyle changes that have occurred in the past five years. Not only have many people changed the way they live because of economic necessity, but before the downturn many people had already begun to reshape the "American Dream" into a vision that did not consist solely of the large detached single family house on a one acre lot. Many people left behind the love affair with the automobile and the associated requirement of driving everywhere, for everything, all the time.

With the economy now in recovery mode, development pressures are again mounting in the region and in Londonderry, with major projects in the pipeline. These pressures will continue to

increase as the housing market gains strength and banks once again begin to issue commercial loans. Now is the time to prepare for the anticipated growth.

Today, the Town of Londonderry is truly at a crossroads and residents must decide how to deal with future growth. There is a strong dichotomy in public opinion among local citizens about how to prepare for change and development. One school of thought is that Londonderry is wonderful the way it is and should not change at all. When it becomes evident that growth is inevitable, it should be in a form that is similar to the status quo of the past 50 years. On the other hand, many other people value the things that originally brought them to Londonderry, such as the schools, sports, and the trail system, but are not content with only having the one lifestyle choice of single-acre lots, strip shopping centers, and hour-long commutes to work. Additionally, they are excited by the prospect of positive change and the potential benefits that can come with a well planned future.

While both of these perspectives are valid positions, the reality is, unless property available for development is purchased, growth is going to occur in Londonderry. It will change the quality of life experienced by its residents and business owners. The question is, “Will this change be for the better or the worse?”

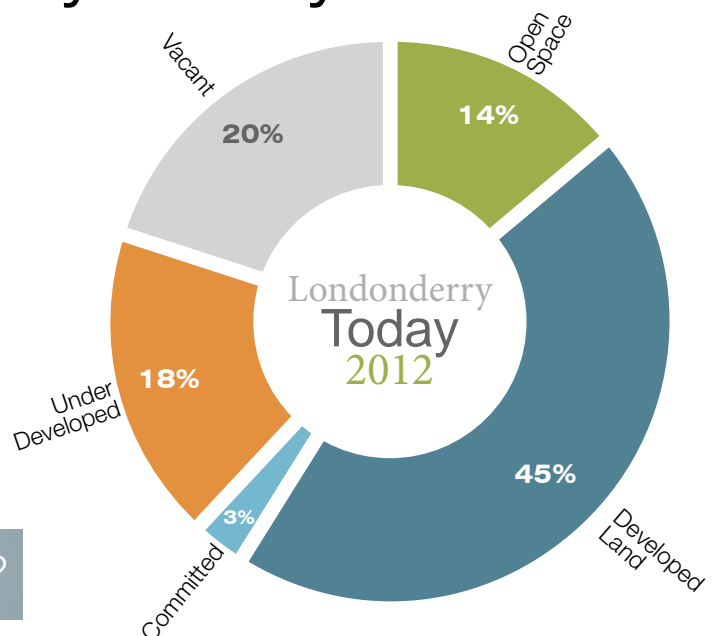
For all of these reasons, the Town of Londonderry Planning Board and Staff became interested in partnering with community leaders and landowners in the area to promote greater balance between the community’s desire for environmental stewardship, economic prosperity, and protection of the small town character and quality of life found in Londonderry. The Comprehensive Master Plan and Planapalooza were the culmination of this effort and a hallmark public process for the Town that saw a new level of open communication and consensus around building a new vision for the future.

What Is Londonderry Today?

Every town has a finite amount of land and it is critical for citizens to understand how this land is occupied today. Broken into five categories, the use of the land ranges from fully developed (45%) to completely preserved (14%). In both of these scenarios, change is unlikely to occur. However, nearly 40% of all land in the town is either vacant or “under-developed”. This portion of the town represents a critical opportunity to determine a new future. And while it often takes time for under-developed land to be fully capitalized, the vacant land stands ready at the moment.

Which leads to an important question...

What Happens To The Vacant Land?



How to Use the Plan

Be a champion of the plan even if you don't like ALL of the ideas.

This plan reflects the ideas of an entire community and includes many differing points of view. You don't have to love everything in the plan, but consider it as a whole and whether or not it takes the community where we it needs and wants to go. The plan contains many important goals and strategies — a bit of something for everyone. Consider the big picture and whether the plan as a whole takes Londonderry in the right direction.

Be a champion of the plan even if all of your ideas aren't included.

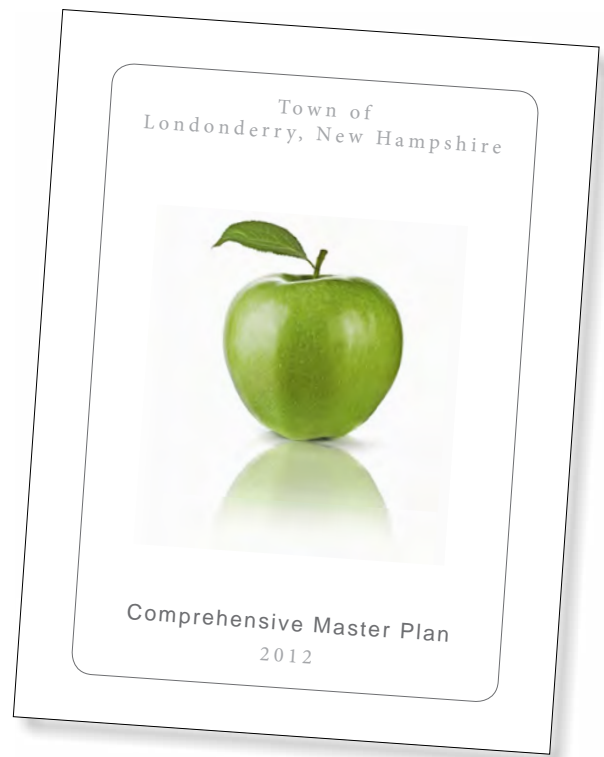
This plan is the culmination of an extensive and transparent community planning process. It is possible that not all of your ideas were included in this document because, (A.) there was disagreement on the topic and the decision was made to go with the consensus of the community, (B.) the idea was tested out and deemed to be unrealistic at this time, or (C.) there was simply not enough room to include ALL the good ideas. If you feel strongly that we got something wrong or accidentally omitted an idea, speak up. This is not the end of this process; there is more to come. This truly is a living document!

Respect the Rule of the Golden Ticket.

A recurring theme throughout Planapalooza was how to make sure the planning work is palatable to those who aren't participating. Agreement was reached among participants that if you don't make the effort to get involved then you don't have the right to complain. Long-time Londonderry resident Reed Clark says, "If you don't vote, if you don't show up, you don't have the golden ticket."

In Londonderry, it is easier than in most places to stay informed. The Town maintains a high level of transparency by providing on-line video of all council and board meetings and quickly and efficiently posting meeting minutes.

But it's not just a right for people to be informed. It's everyone's duty to participate.



Take responsibility and be a part of the implementation team.

Although we all wish our tax dollars bought us unlimited city services, the reality is there is more work to be done than staff to do the work. All of these great ideas take time, money, and capacity. For this plan to become a reality, a large number of people must decide they care enough to get involved and help execute the plan. This is the reality of the new economy. Communities that work together, and work smartly, succeed.

"If you don't vote, if you don't show up, you don't have the golden ticket."

—REED CLARK

Understand the element of time.

At first glance, the plan can seem ambitious, daunting, and even a little frightening. Included are some big ideas that would bring about transformative change. It is important to understand that not everything in this plan will happen at once, or happen at all. Some things will happen right away; while other ideas will take years or even decades to come to fruition. Ultimately, the success of this plan will be measured by its implementation, and we challenge our elected officials with making the community vision, and guiding principles formed by this document a reality.



DISCUSSION DRAFT

the process

The Town of Londonderry led a one year public engagement process to generate interest and involvement in the development of the Town's Comprehensive Master Plan. Over the course of the process, the Project Steering Committee pounded the pavement, using a number of creative techniques to reach a broad cross-section of the community and spread the word about the project and the importance of having a voice in shaping the future of the town. In today's busy world, where there is no one way to reach people, Londonderry set a new standard for outreach, inventing new ways to engage the public and generate buzz.

Project Steering Committee

A project steering committee was appointed by the Town's Planning Board for developing the comprehensive master plan. Primary duties of the committee include direct oversight of the planning process, review of draft plan materials, and coordination with key stakeholders, elected officials, and local residents. Membership on the committee included elected officials, business owners, interested citizens, and representatives of boards, commissions, and organizations.

The committee has met regularly for just over a year (10 committee meetings plus occasional ad hoc subcommittees) with each committee member dedicating 20-40 hours of their time to guide the development of the comprehensive master plan.

Telephone Survey

For the first public engagement activity, the Steering Committee worked with the UNH Survey Center to carry out a 15-minute phone survey of 500 randomly selected residents. Residents were urged to 'pick up the phone' and answer a series of questions designed to gauge the attitudes and opinions of Londonderry residents regarding development styles and capital projects in town. Questions covered a wide range of topics including transportation systems, natural resources, energy, recreation, housing and economic development, as well as open questions about likes and dislikes.

Social & Online Media

TPUDC and Town Staff maintained a web presence on both the Town website and project Facebook page. The Town site was used to post documents, reports and static resources while the Master Plan Facebook page was the Town's very first social networking platform. Staff, Steering Committee members and TPUDC coordinated to keep the Facebook page updated with the latest announce-

ments, pictures and illustrations, questions-of-the-day, meeting videos, and member discussions of the planning process. It remained very active throughout the Planapalooza events with more than 130 users "liking" the page. In a similar vein, press releases were sent to the major community blogs in Londonderry, including www.townupdate.com, www.visitlondonderry.com and www.londonderrynh.net. The latter site provided a redistribution of press releases via a twitter feed to over 2000 registrants. Email blasts were also utilized by Committee members to encourage large groups of people to attend the events.

Print Media

Staff and Committee members supplied press releases, "letters to the editor", and access to local media outlets that covered and reported on the events. Prior to the Planapalooza, Londonderry Times drafted editorials encouraging public participation while other journalists from the Times, Derry News and the NH Union Leader reported on Steering Committee meetings and events throughout the process.

TPUDC and Town Staff also designed and produced posters, postcards, and advertisements that were provided to media outlets and distributed during events announcing the planning event. Printed media was placed throughout the community in prominent locations while an advertisement ran in the Londonderry Times for five weeks leading up to the planning week. Additionally, a large banner hung over Mammoth Road that announced Planapalooza to passers-by and an electronic message board in front of the Library displayed the week's schedule, with daily updates. Public service announcements were broadcast on the Town and School cable channels (5 channels in all) before and during the planning week.

Personal Outreach

Letters were sent to approximately 75 stakeholders in the business community inviting them to participate in all Planapalooza events. TPUDC inter-

Public Outreach

viewed policy makers, including members of the Town Council and Planning Board in the weeks leading up to the process. Formal invitations were sent to the home addresses of all 9 State Representatives residing in Town. Internally, Steering Committee members, who each represents at least one Board, committee or organization, created their own “word of mouth” campaigns, sending formal and informal emails soliciting participation in all the Master Planning events. Each member was also required to bring no less than 5 people to the planning events.

Target Meetings

In order to capture input from younger residents, Steering Committee members reached out to the schools via presentations by TPUDC and Town Staff, a student planning workshop, and announcements distributed by the School District Superintendent to parents in the district. Eighteen middle and high school students engaged in the youth workshop with TPUDC through various hands-on activities and dialogue. Younger children also had an opportunity to express their vision in a poster drawing exercise coordinated through the YMCA-led after school program at each of the three elementary schools.

The Steering Committee Chair visited the Senior Center on two occasions to encourage participation in the planning process and issue seniors the challenge to respond to the student perspective by creating a vision for the Community. A special topic meeting was then scheduled and held during Planapalooza dedicated to the interests of seniors and Londonderry’s aging population.

Special Events

Staff and Steering Committee members, along with TPUDC, took the public outreach campaign “to the people” beginning with an interactive booth on voting day in March, 2012, and a postcard blitz at the spring High School band concert, where over 300 cards were passed out to parents of band members. Committee members also vol-

unteered every weekend at Londonderry Athletic Field Association baseball games and Youth Soccer Association games, coupled with one-time events (like Adams Pond Day, the Moms Club Toy Swap, and Old Home Day) to display banners, hand out postcards, and answer questions about the Master Plan and Planapalooza.

Public Workshop

On April 12, 2012, the Master Plan Steering Committee and TPUDC together held their first Citizen Workshop in the Planapalooza process at the Londonderry High School Cafeteria, where approximately 50 participants began discussing the vision and future of Londonderry. Participants represented a wide range of ages, backgrounds and interests, and a solid foundation for subsequent events emerged.

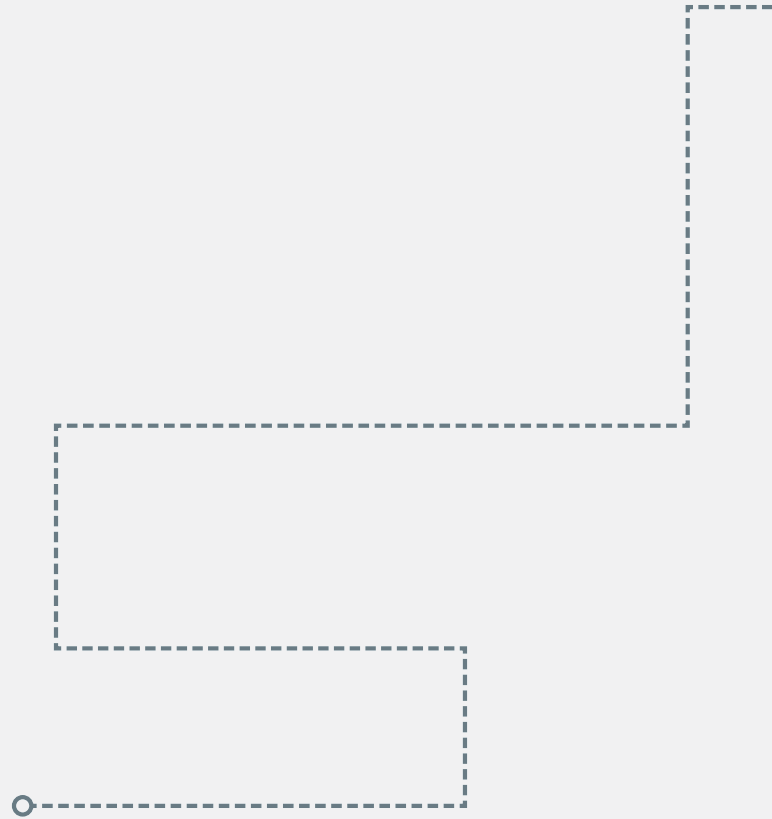
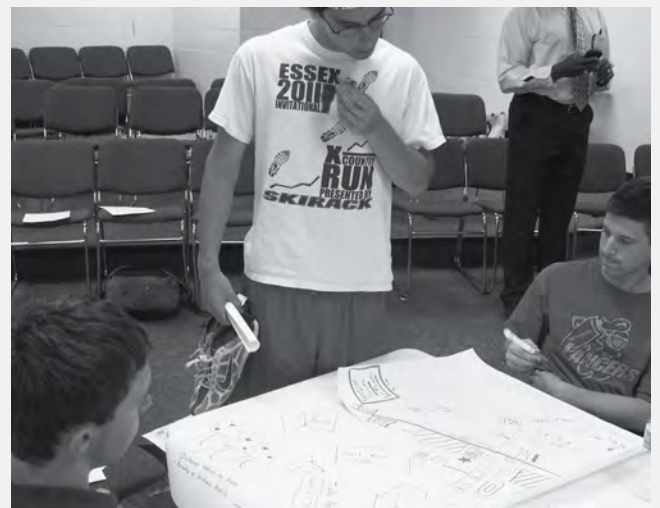
Public Access

Londonderry intentionally conducted transparent meetings and events throughout the planning process, including the process to select TPUDC as the consultant to create a Master Plan for the Town. Steering Committee meetings were carried both live and in subsequent re-broadcasts over the community access channel. The High School cafeteria and Lions Hall (in addition to the planning studio location in Council Chambers at the Town Hall) were selected as venues for Planapalooza events because of location and ability to support the broadcast of workshops/presentations while offering access to the public at all times. Presentation recordings and Steering Committee meeting minutes were likewise subsequently posted online.

AND... Planapalooza.

Student Workshop

On this first day of Planapalooza, a student workshop was held at Londonderry High School to get the perspective of local school youth. Students were asked, “what’s the point of planning for the future?” They were also engaged in a hands-on exercise to draw their neighborhoods, identifying places that are important to them.



QUESTION: “what’s the point of planning for the future?”

ANSWERS:

“to create a concrete plan for future development”

“THIS IS WHERE WE LIVE”

“to make life sustainable for future generations”

“to make sure Londonderry is economically and environmentally safe”

“to always have things to do in Londonderry”

“to make life better for our children”

“to get more of what we want in our town”

“to make sure people will want to come back to Londonderry”

“so we don’t waste money”

“to be the most efficient and logical in the development of the town.”

Planapalooza



From May 31 through June 5, 2012, the citizens of Londonderry were invited to participate in a multi-day planning and design exercise to develop a vision for the future of the Town using smart growth and sustainable design principles.



Planapalooza was an intensive community design workshop that involved all citizens interested in the future of their community. This intensive engagement process provided an open forum for the public to work closely with the Town and planning consultants from Town Planning & Urban Design Collaborative (TPUDC) to identify big ideas and generate a comprehensive vision for the future.

Planapalooza was held in the heart of Londonderry in the Moose Hill Room in Town Hall. The planning team, along with Town planning staff, set up a full working office and studio at the site, with over 400 members of the public stopping by to attend meetings, provide input, or talk with the planners.

Planapalooza kicked off with a planning workshop for local teens who contributed their thoughts on Londonderry and why it is important to plan for the future. That evening, the entire community was invited to a cookout at the high school, followed by an introductory presentation on planning and smart growth principles by Brian Wright of TPUDC. Immediately following the presentation, the consultant team facilitated a hands-on design workshop where the 100 participants were invited to roll up their sleeves and brainstorm their ideas for improving the Town, working over base maps. Participants identified key areas of concern and opportunity related to the Elements of the comprehensive master plan.

On the second and third day of Planapalooza, the team conducted technical meetings related to the elements of the plan. These included land and business owners; public utilities; transportation; land use and community design; natural resources and open space; housing and neighborhoods; economic development, and community facilities. In addition, there was also a special meeting with senior citizens. Meanwhile, members of the team began developing plan alternatives, while gathering information real time from these meetings.

On the third night of Planapalooza, a public pin-up was held in the studio, giving the team a chance to present alternatives plan scenarios based on ideas generated by the public. A varied but intimate group of people assembled to see the draft plans and provide feedback on what they liked about the ideas presented, and where further work was needed.

During the remainder of the planning week, members of the public continued to filter into the studio, adding their ideas at the base map station and talking to the team. Feeding

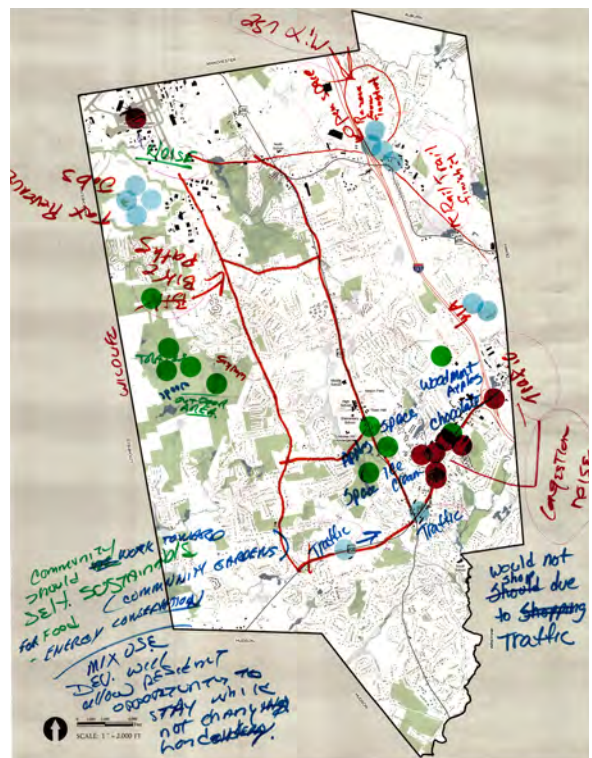
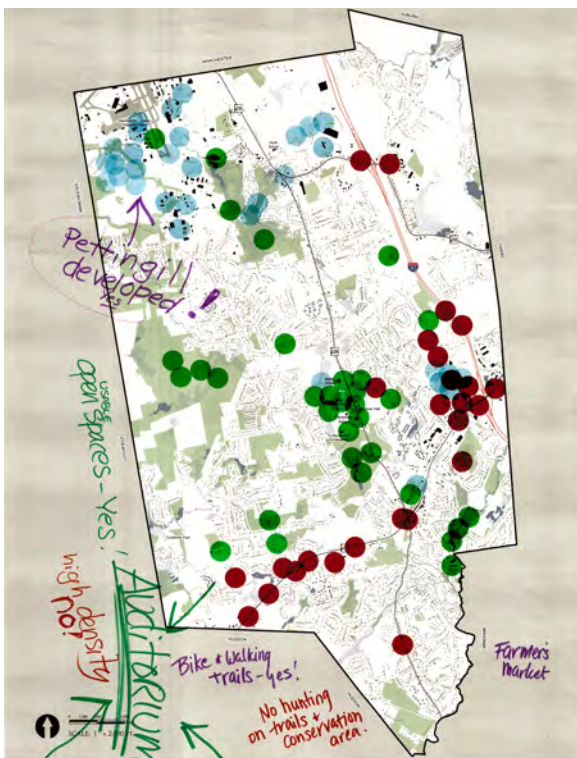
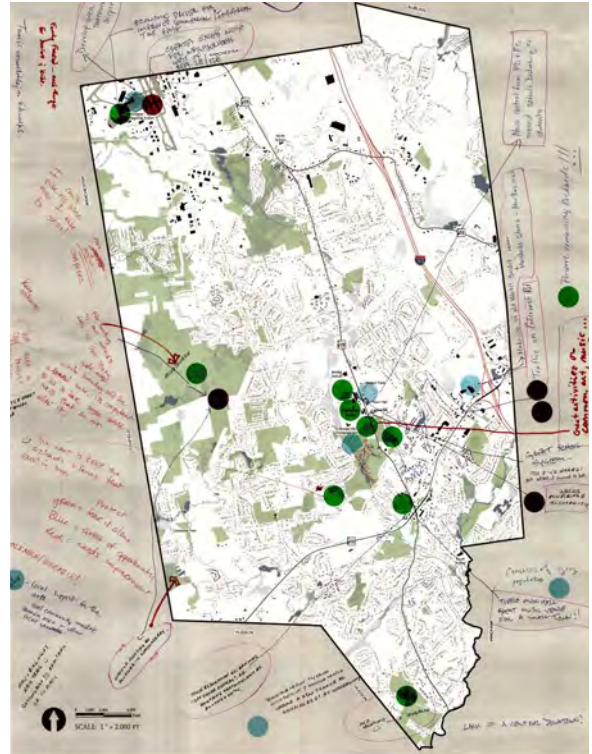
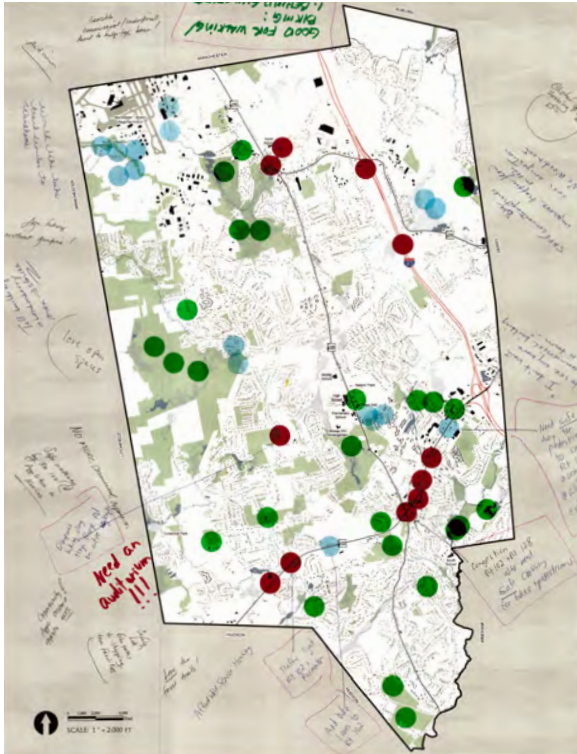


off this buzz of activity, the team entered production mode, synthesizing ideas, collaborating over design challenges, preparing renderings, compiling precedent images, and drawing up the final master plan.

Based on all the input from the public gathered at the Hands-on Workshop, stakeholder meetings, the intermediate pin-up, and drop-ins, the TPUDC team developed a final preferred master plan for the Town. The master plan captures the spirit of Londonderry and depicts possible growth scenarios, building configurations, parks and plazas, street connections, and public facilities.

A final presentation took place on the last day of Planapalooza, at which time all of the work produced during the week was presented and explained. The meeting was attended by over 60 members of the community.

Following the presentation, there were tough questions, but an unprecedented showing of support for the vision as presented, a clear indication that the community achieved consensus and knows what it wants for the future of the Town.





the vision

The common vision and timeless principles presented in the comprehensive master plan move forward the community's desires for smart growth, greater diversity and choice, and the protection of environmentally-sensitive lands and resources. Together, they also direct all other sections of the master plan document, and organize key recommendations and implementing tools for realizing the community's stated vision.

Guiding Principles

The project team worked with the Master Plan Steering Committee, property owners, key stakeholders, and members of the general public to identify a set of enduring principles critical to the identity of Londonderry. These principles represent the core philosophy for achieving the community's desire of remaining a close-knit, vibrant place in the heart of protected forests and farms. The stated principles are held in common by residents now and should endure into the future, though the local context and approach for achieving these goals may change over time.

The comprehensive master plan seeks to honor and promote these principles, generating a vision and setting priorities to move the Town with greater commitment in a direction that will be celebrated by the citizens of Londonderry.

In the end, the value of the recommendations contained within the comprehensive master plan depend on local leaders to incorporate these goals into the decision making culture of the Town. Plan recommendations should be used by elected officials and appointed board members to evaluate development applications, amend ordinances, and plan future expenditures consistent with the vision plan.



STAY FOREVER GREEN

Promote and preserve Londonderry's green advantage, including lakes, wetlands, woods, trails, agricultural lands, and tree canopy. Strive to create an interconnected network of green space that conserves critical natural areas, provides recreational linkages, and contributes to the identity and sense of place within the community. As part of this wholistic system, integrate sustainable stormwater practices that contribute to the beauty of the public realm.



PROMOTE UNIQUE ACTIVITY CENTERS

Encourage the development of unique activity centers that include a mix of uses and activities located close together, providing people with new options for places to live, work, shop, and participate in civic life. Centers should vary in scale, use, and intensity, represented by a hierarchy of rural hamlets, walkable neighborhoods, mixed-use village centers, and the town commons, all of which reflect the rural character of Londonderry. The presence of activity centers should further the economic vitality and sustainability of the town, while also promoting social interaction and community building.



EMPHASIZE HOUSING CHOICE & DIVERSITY

Provide a greater range of alternative housing choices to enable a diversity of people at all stages of life to enjoy Londonderry, including young adults, families, retirees, seniors, and people of different income levels. A range of housing opportunities should be available including small cottages, dignified multi-family housing, and live work units, in addition to single family homes. A more diversified housing strategy will promote affordable housing and a more livable community.



INCREASE TRANSPORTATION CHOICE & WALKABILITY

Provide a safe, reliable transportation system that balances all modes of transportation, including walking, biking, public transportation, and cars. Consider land use and infrastructure together, promoting complete streets that emphasize the quality and character of both the thoroughfare and the private realm. Emphasis should be placed on both destination-based as well as recreational trips, promoting active living for all ages, with special attention given to the mobility of children and seniors. Investment in the transportation system should favor multi-modal travel solutions, especially in new, walkable activity centers and along the corridors that link them, with capital improvements and town policies targeted for vehicle, bicycle, pedestrian, and transit users.



ENHANCE THE MUNICIPAL ADVANTAGE

Promote a healthy and sustainable business environment by actively investing in infrastructure, providing favorable incentives, and building a community that is attractive to employers and their workers. Continue to promote Londonderry and build a competitive advantage within Southern New Hampshire for attracting knowledge-based employers to the area. Investment and recruitment initiatives should realize 'triple bottom-line' benefits for town residents by seeking to improve the tax base, promote economic vitality for local shops and businesses, and increase access to employment opportunities in town.



EXCEL IN EDUCATION & TOWN SERVICES

Continue to advance quality-of-life for all residents of Londonderry by maintaining and expanding education and town services, while ensuring that elected officials are good stewards of Town finances. This includes a strong partnership with the Londonderry School District to support their high quality programming and academic achievement, while continuing to earn strong community support.



reflections

The following pages focus on existing conditions, emerging trends, and priority issues raised by the community relating to where Londonderry is today, and setting the stage for where the Town needs to go in the future. The technical analysis, insights, and the reoccurring themes heard during Planapalooza formed the foundation on which the rest of this Comprehensive Master Plan were based. The insights touch on community character, regional forces, mobility and a number of other elements that all directly influence the town's development and sustainability into the future.

These following elements are detailed here: regional context, community character, demographics and population, business climate, natural resources and open space, transportation and mobility, community facilities and services, cultural and historic resources, housing and neighborhoods, natural hazards, and regulatory tools.

Regional Context

The town of Londonderry, New Hampshire is located in Rockingham County and nestled among thousands of acres of open space. Originally a rural agricultural community, Londonderry experienced extreme growth in the 80's, making it the suburban town it is today, with a mix of low density residential neighborhoods, auto-oriented retail, and a strong office and industrial presence. With a population of 23,236, the town is the third largest in the Southern New Hampshire region and functions as a suburban bedroom community to Manchester and Boston, with almost 80% of residents commuting out of town for work.

Routes 128 and 102 cross south of the town center and 3A runs west of the towns border, joining Londonderry to its local neighbors—Derry, Windham, and Litchfield—all of which are within a 15 minute drive. Interstate 93 connects Londonderry to Boston, located 45 miles south and Manchester, NH, located just 10 miles north. Besides providing convenient access for commuters, Londonderry benefits from its proximity to the Manchester-Boston Regional Airport.

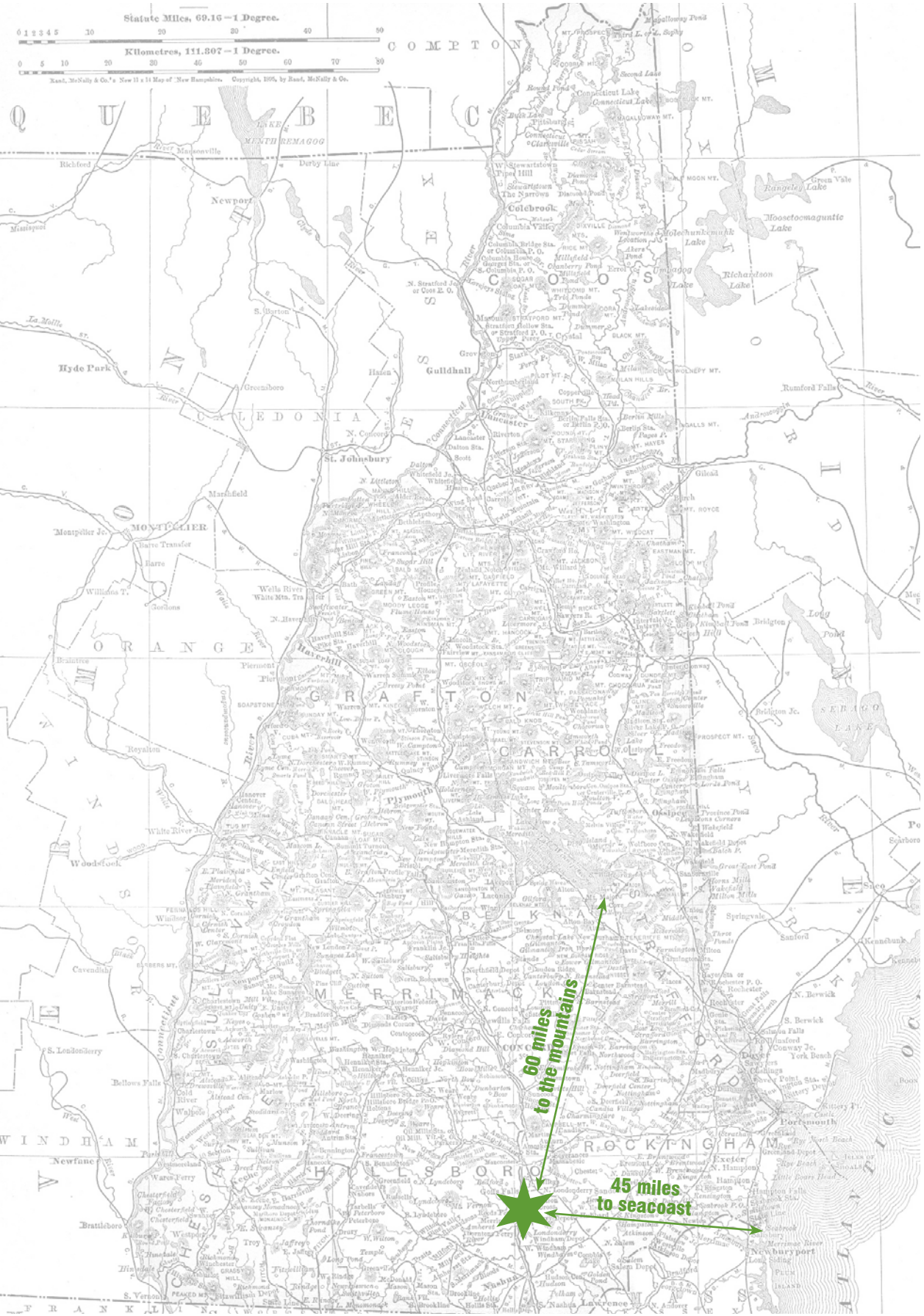
Londonderry benefits from its proximity to both the seacoast and the mountains. A 45-minute drive brings you to the coast and an hour drive takes you to both the mountains and the

Monadnock Region, giving the community easy access to large scale recreational areas.

Within the region, Londonderry is known for its apple orchards. A New Hampshire Scenic and Cultural Byway runs through the town, fittingly called The Apple Way, which connects the orchards, old farmhouses, and local landmarks revealing the history of the area.

Londonderry is particularly well known for its quality school system, attracting people from across New England who move to town for the schools and the opportunity for their kids to participate in the local recreation, sporting events, and music program.

To remain competitive in the region, Londonderry needs a clear vision that supports and builds on the Town's municipal advantages, preparing the community for a long and sustainable future. Of critical importance is protecting the natural resources that attract residents and visitors alike, continuing to grow businesses that employ local residents and draw in workers, and maintaining a strong tax base so that the school system can remain well funded and strong.



Demographics & Population

As of the 2010 US Census, approximately 24,129 people lived in the Town of Londonderry, making it the third largest community in the Southern NH Planning Region behind Manchester and Derry. For the first years 258 years since its being chartered, Londonderry's population grew gradually. Then, in 1980 an explosion of growth occurred that changed the landscape of Londonderry forever.

Historically, Londonderry has not attracted a significant share of younger professionals under the age of 35. While this cohort is not a major demand driver in the Londonderry market, there is an opportunity to attract this demographic through appropriately scaled multifamily development with complementary lifestyle amenities and entertainment options.

Londonderry's age profile is skewed older (median age of 40.5, as compared to 38.4 throughout the region) by a relatively large concentration of people between age 35 and 54, which is indicative of families with school aged children.

In order to create a more well rounded community with a better distributed demographic profile, Londonderry will need to offer more choice in the types of housing, shopping and entertainment options offered. Additionally, the preferences related to sense of place and community character of demographic cohorts not currently plentiful in Londonderry as well as the preferences related to the businesses of the 21st century will need to be met if the Town hopes to attract the types residents and business it is looking for.



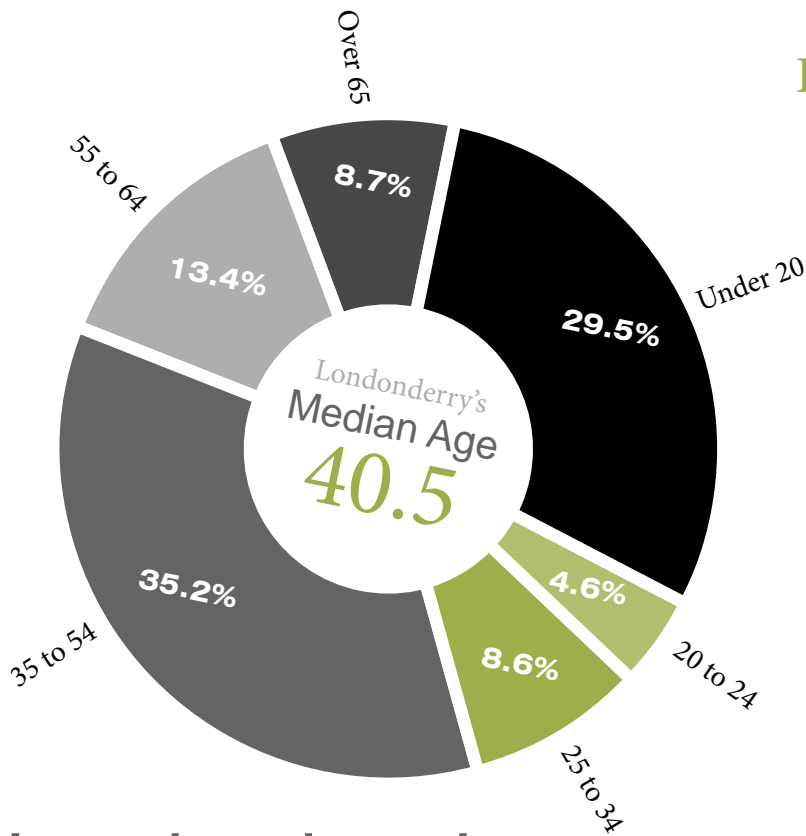
WHAT WE HEARD

Londonderry is a great place for parents of young children. Many move to Londonderry while their children are in school and move away afterwards. The elderly population could use more housing options and more communication about the services that are available for them. The younger generations are interested in a more walkable, compact lifestyle and the city needs to keep this in mind in order to attract younger people to town.



londonderry's growth since 1800

demographic profile



Londonderry's Age Breakdown

Londonderry is the

3rd

largest community in the Southern New Hampshire Planning Region

Londonderry is projected to capture

over **16%**

of the regions growth between now and 2020

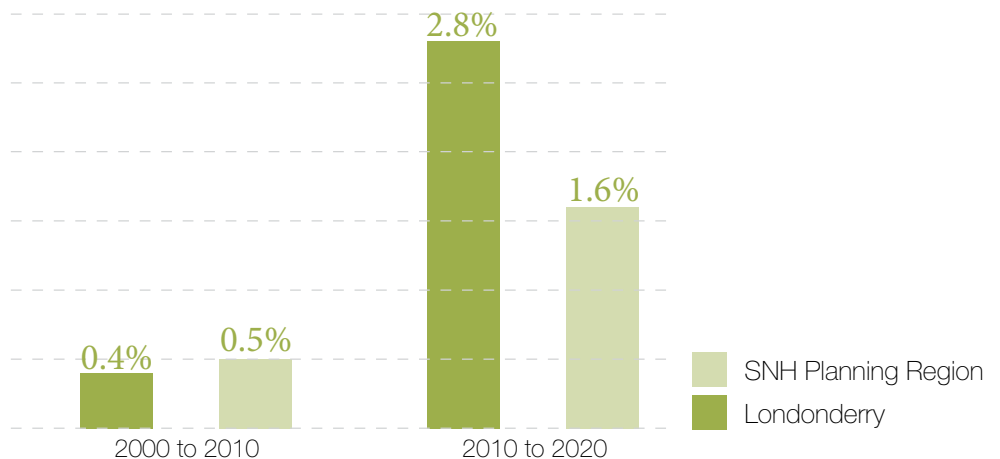
24,129

2010 population of Londonderry



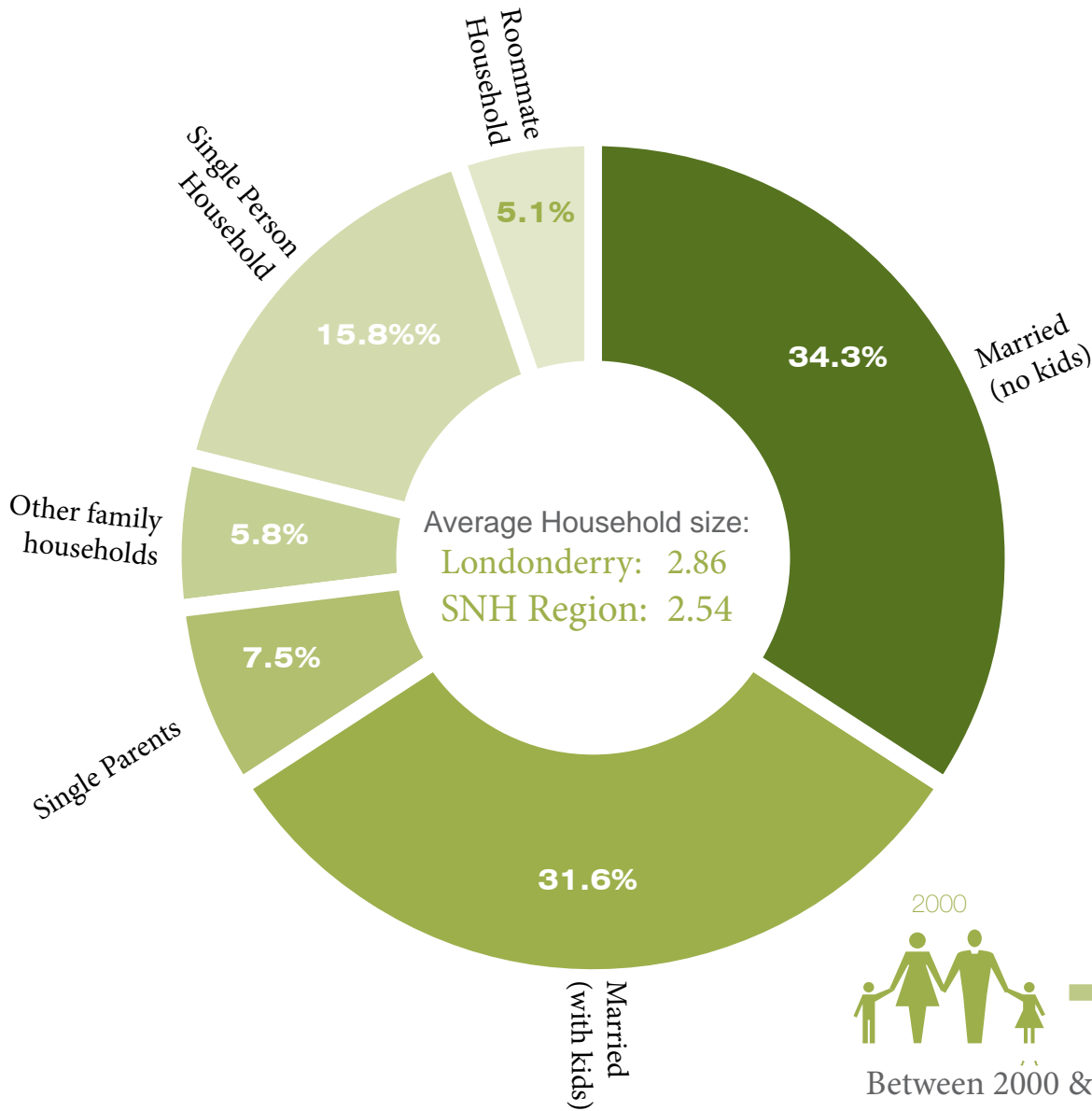
31,688

2030 Londonderry population projection



Compound Annual Growth Rate

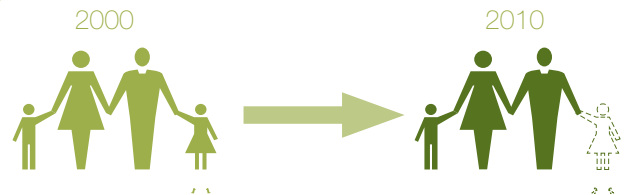
DISCUSSION DRAFT



8,438
Households in Londonderry

61%

of the households in Londonderry do not have children.



Between 2000 & 2010 the average household size in Londonderry shrank.

41%

of Londonderrians over 25 years old have a bachelor's degree or higher.

where as only

27%

of the population of the U.S. has attained the same level of education.

Insight:

Londonderry's age profile is skewed older (median age of 40.5, as compared to 38.4 throughout the region) by a relatively large concentration of people between age 35 and 54, which is indicative of families with school aged children.

There is a notable gap in the population of 20 to 24 yr. olds and 25 to 34 yr. olds representing only 4.6% and 8.6% of the population respectively.

The rate of household formation between 2000 and 2010 exceeded the town's population growth, suggesting that households are shrinking in size.

Community Character

Londonderry's physical characteristics reflect the time of its greatest change, when suburban development was a common and cherished practice. As a suburban town, its physical form is defined by separated uses with a heavy focus on detached single-family neighborhoods and commercial strip centers as seen in the images that follow. The neighborhoods are typically built as quiet enclaves; streets have limited access and terminate into cul-de-sacs. Both residential and commercial development is surrounded by heavily wooded buffers giving Londonderry a pseudo-rural appearance.

The road network is small and calm and dedicated primarily to local traffic. This is due in large part to the lack of connectivity found with the development patterns in Londonderry. The lack of connectivity impacts traffic flow because all of the traffic are forced on to a few collector roads.

As the neighborhoods give way to commercial and industrial development, so too do roadways

become wider, more intense. In these highway areas, also known as "corridors", most of the commercial and industrial development is placed along the highway's road frontage. These uses are strictly kept separate from neighborhoods.

These highway corridors eventually coalesce into what was the historic center of the town. The 'center' of the town is focused on the schools and ball fields and during special events on the Town Common, but these amenities are have a scattered and irregular layout. There is no clear center in part because the development patterns around the Commons do not define the space, promote walkability or encourage daily use of the space.

Finally, apple orchards dot the landscape providing the rural character that is loved by the community and help to instill the sense that Londonderry's built environment, though suburban, possesses a quiet, rural character that is loved by the community.





Development Status Map

- Undeveloped Areas
- Developed Areas



Strip Retail:

Strip retail is characterized as diverse commercial developments arranged in long, narrow buildings. Each building may house as many as ten different tenants occupying as little as 500 square feet of leasable space. These developments are exclusively oriented to highways and advertise their services with large signage. Parking tends to be located in between the road and the retail. Though mostly generic in its design, this format allows for quick, convenient shopping and a multitude of services at one location.



Big Box Retail:

Big box retail is easily recognizable for its large (40,000 square feet or more) buildings that are one-story in height and designed with minimal architecture. The most familiar buildings of this type feature large parking fields with hundreds of spaces to support high volumes of customers. These “big box” buildings are served by highways but set back from traffic by hundreds of feet. Though this development type is often difficult to restore after vacancies occur, its presence still plays a major factor in the town’s economy.



Cul-de-sac Neighborhood:

The most common development type in Londonderry, the cul-de-sac neighborhood is a limited-access, low intensity, suburban enclave named after its trademark dead end streets. Such streets separate connections between neighboring areas and prevent any non-local traffic, though at the cost of increasing travel distances and congestion. Uses are almost exclusively single family residential with homes of a consistent shape and size on large lots (1/4 acre or greater). Though widely prevalent in the town, these developments are seldom seen by visitors as they are frequently buffered from major roadways.



Apartment Complex:

Apartment complexes are high-density residential uses that are commonly designed as “stacked flat” developments. Featuring as many as 25 dwelling units per acre, these developments require shared parking areas, multi-story designs, common community spaces, and easy access from major roadways. Though these developments can vary greatly in quality, the best examples are often smaller in scale and made compatible with single-family neighborhoods through the use of quality public spaces, inviting architecture, and minimized hardscapes.



Office Complex:

Office Complexes range widely from single multi-story monoliths to multiple single-story campuses. And while the combinations are many, the basic use is the same. Office complexes serve as a singular, sometimes isolated, working environment. Access is often limited solely to employees and parking is arranged around the site in equal distributions. Though often separate from homes and commercial sites, these complexes can be suitable for a variety of uses given their versatile form.



Industrial Park:

The industrial park is a high-activity center featuring 24-hour working environments and a high prevalence of freight traffic. Though oftentimes located in remote parts of town, these parks are visited by a large share of the residents, most of whom work in the area. The park is not commonly a place designed for public access and enjoyment. Characteristics include functional design for buildings, wide roads for heavy trucks, and an emphasis on safe, slow, specific operations. With new technologies, few industrial uses are noxious to surrounding neighbors though residences are seldom within walking distance.

WHAT WE HEARD

Most Londonderry residents moved to Londonderry for the traditional New England atmosphere. They want to preserve that character and see new places built that will add to that character and to Londonderry's walkability. Many people mentioned Nashua Road (NH 102) as a place in Londonderry that they didn't like. While people appreciate the convenience of having those businesses available, they are not happy with how it looks.

Overall, Londonderry residents want growth to be appropriately scaled for a small town, and they want new development to be located in its proper place. As some stated, this will mean working towards making Londonderry more walkable, compact, and with a discernible center.

Many stated that industrial businesses should be restricted to the industrial area or to the area surrounding the I-93 connector. Additionally, big box stores should be limited to the interstate exits. At the same time, residents are aware of how changes in growth patterns will affect tax revenue. They want to protect the things that drew them here in the first place and improve upon the town's character.

Business Climate

Considering its size, Londonderry has a number of industries and large businesses including Stonyfield Yogurt, Coca-Cola and many high tech manufacturing companies. These businesses can be supplemented by bringing in a diverse mix of business activity which can reduce the economic risk of the community and diversify the workforce. In order for economic development to be successful, it has to be market realistic and consistent with the character and scale of the community.

There is a perception that opening a business in Londonderry is difficult due to zoning and permitting issues. These concerns can easily be alleviated and perceptions reversed with revisions to the zoning ordinance. The manufacturing sector is particularly strong and has a major regional concentration in Londonderry with opportunities for growth. The office sector is similarly growing with the focus on small business needing 2000 sf. or less of space. While it makes it more challenging to lease space with these types of users, it lends itself to a climate of unique operations.

While there seems to be a strong appreciation for buying local goods, products and services, there seems to be less follow through when it comes time to make a purchase. With all of the small business located in Londonderry, a Buy Local campaign could easily find good traction if the right organizational steps are put in place and marketing efforts are executed.



WHAT WE HEARD

Residents and Small Business owners in Londonderry want to create an encouraging climate. Many stated that it is currently difficult for businesses to work through the planning and approval process because it is unfair, unclear and cumbersome. They want a simpler, easier process for opening and running a business. They want to support small and local business by buying local. Many folks also mentioned big businesses and chain retail. The consensus was to make sure those big chain retail stores are a good fit for Londonderry and are located in the right place.

retail sector trends

Insight:

Londonderry has a robust retail sector with many stores for residents to choose from. The broad variety has led to a wide range of rents, allowing many types of retailers to enter the market.

\$3 psf ← range of rents → \$17.65 psf

The Benchmark:

There is a specific volume of sales that will trigger further investment in the retail sector. That number is currently met in some stores and can be met by the whole sector with the right approach.



per square foot*

* Amount of sales needed for area to trigger more investment

A Solution:



Destination Retail

To attract further investment, the retail market can utilize the power of “proximity-based sales”. Existing anchor stores, can attract additional support retailers as well as employers and housing to draw all three major consumers to a destination. Doing so will improve the sales of the area.

These “destination retail centers” are already in existence in Londonderry. The only missing ingredient is a few of the missing pieces to be added to the existing centers.

office sector trends

Office Users in the Southern NH Planning Region are projected to add over 2,000 jobs between by 2018. This is driven in large part by expansion in the Professional, Scientific and Technology Services sectors.

2,000 sf. or less

is the amount of space the typical office user in the Londonderry market could easily function in.

277,000 sf
of office space is available for rent in the Londonderry market

35% of which is located at the Falling Water Office Park under construction near the airport

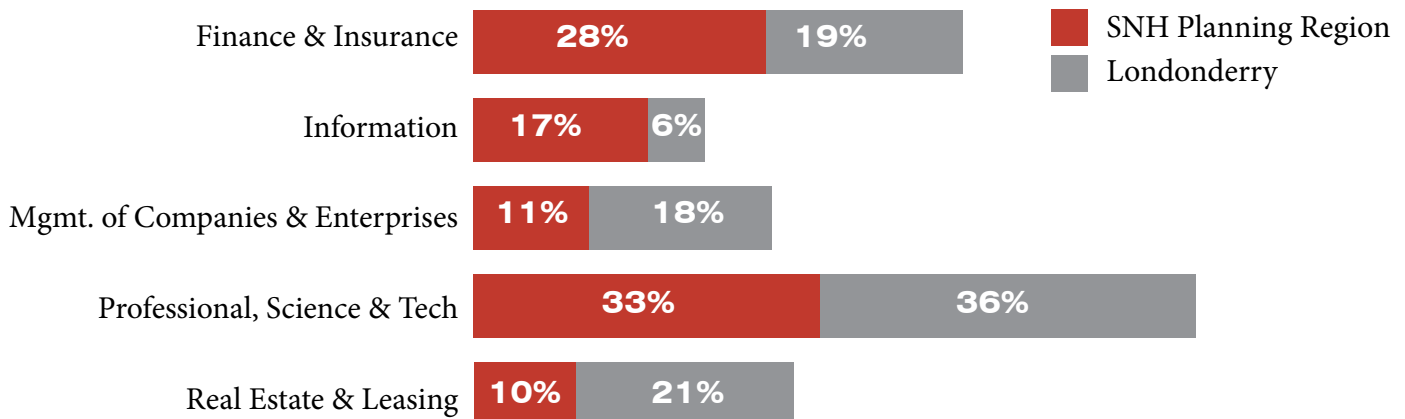
\$72,898

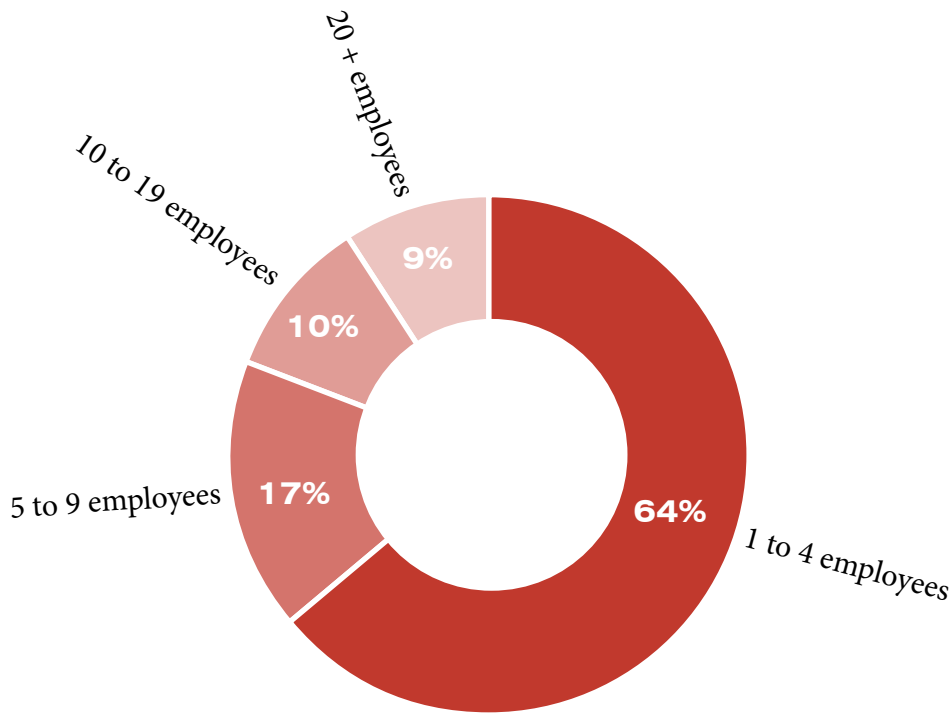
Average Office Wage in SNH Region

\$62,033

Average Office Wage in Londonderry

Office Jobs by Sector





Firm Size of Londonderry Office Users

An Employment Concentration Index of >1.25 is considered a strong concentration of jobs

Londonderry's Employment Concentration Index for Office is

0.48

5.4%

of regional employment in Londonderry are in office jobs

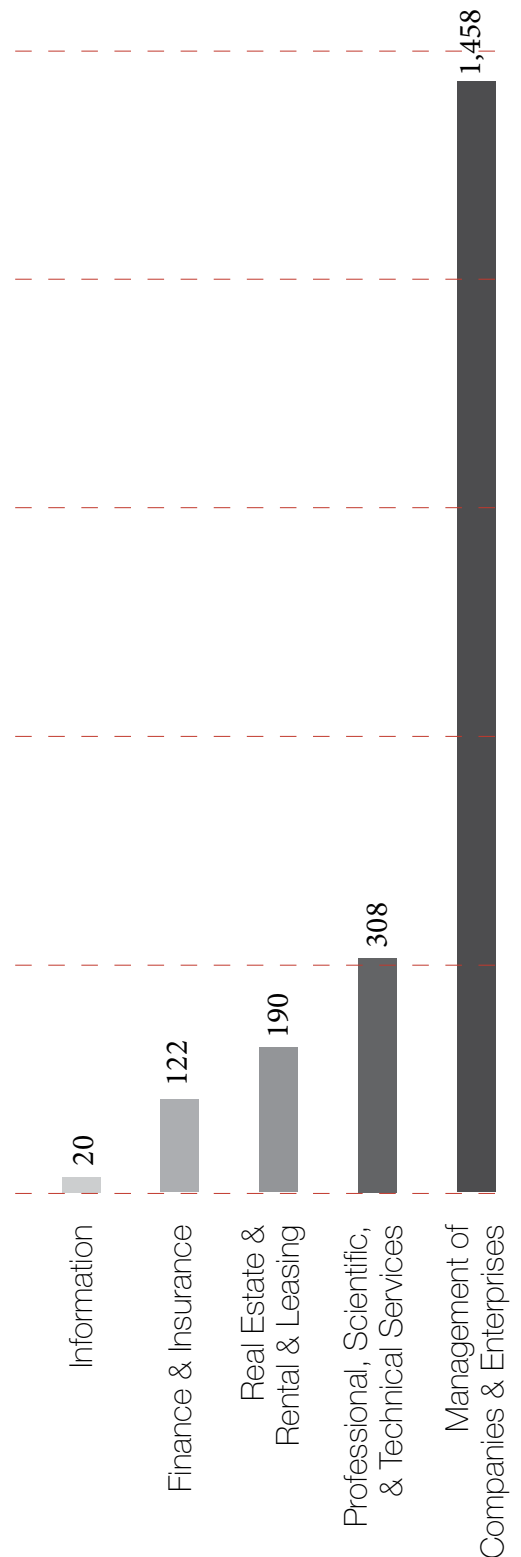
11.3%

of all regional jobs in Londonderry are in office jobs

Insight:

There are few medical office sector, which is expanding locally and nationwide.

The Employment Concentration Index for office jobs is relatively low.



Projected Change In Office By 2018

manufacturing trends

1,420 jobs are projected to be lost in the SNH region by 2018

----- however -----

There is anticipated expansion in the Wholesale Trade, Transportation and Warehousing sectors

11,729

Manufacturing Jobs in the Southern NH Planning Region

3,267

Manufacturing jobs in Londonderry



\$64,893

Average Manufacturing Wage in SNH Region

\$79,960

Average Manufacturing Wage in Londonderry

27.9%

of regional sector jobs located in Londonderry

11.3%

of all regional jobs in Londonderry



25%

of all jobs in Londonderry are in manufacturing

Insight:

Londonderry's Employment Concentration Index for Manufacturing is nearly twice as high as is considered a strong concentration of jobs.

A majority of the largest employers are in the high tech and aerospace manufacturing field.

The largest concentrations of jobs are around the airport and Route 102.

An Employment Concentration Index of >1.25 is considered a strong concentration of jobs

Londonderry's Employment Concentration Index for Office is

2.47

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**[feel free to sketch, scribble
and be creative]**

Housing & Neighborhoods

Neighborhoods are the backbone of society; besides being a place to live, they also provide the essential components for living a complete life which, including places to socialize, stores to buy necessities, and nearby schools and employment centers. Traditionally, neighborhoods were organized around an interconnected street network, which allowed easy movement for both vehicles and pedestrians. These streets and natural features defined the edges of neighborhood areas, each with their own unique pockets of community life along smaller residential streets and in neighborhood centers.

Londonderry had the majority of its growth after the advent of the automobile. During this time growth patterns spread in a low density forms, requiring a car to meet all the needs of daily life. Today, Londonderry has a lack of visibly discernible neighborhoods, even though residents identify with the social construct of their subdivisions and most frequently their cul de sac.

Housing in Londonderry is a mix primarily consisting of homes built after 1980 and some historic homes scattered across the Town. With a few notable exceptions on major roads, and in some historic districts, Londonderry does not give the impression to the passer by or a visitor that it is such a historic community. While single family homes dominate the landscape of

Londonderry, there are few options for other living arrangements based on preferences or needs.

Londonderry does not offer the elderly the opportunity to age in place unless they can afford to pay for at home nursing or have friends and family to help them once they can no longer care for themselves. At this stage in life people have to move out of the Town because there is no housing option for someone who can't drive or care for themselves.

Additionally, housing prices keep new graduates, people looking for started homes and employees of many local businesses from being able to purchase in Londonderry.

WHAT WE HEARD

Londonderry residents have mixed feelings about living and working in the same place. Some want to live close to their jobs so they can walk to work. Others want the geographical separation of work and home. Residents know that a better variety of housing options is needed in the city, but they want to make sure that options such as apartments are designed and sited in the best places. Residents would prefer to have their garages connected to their houses even if the garage must be set back from the street.

household growth

472

households were added in Londonderry between 2000 & 2010 headed by someone age 65 or older

MORE THAN ANY OTHER COMMUNITY IN THE SNH PLANNING REGION

469

single-person households were added in Londonderry between 2000 & 2010

Between 2000 and 2010,

Londonderry only added households with incomes in excess of

\$100,000

Between 2000 and 2010, in the SNHPR Londonderry captured:

14% of new households comprised of one or two people

11.9% of new owner-occupied households

11.4% of total household growth

10.0% of new households earning more than \$150,000 per year

14.5% households added between 2000 & 2010 headed by someone age 55 or older

Insight:

Londonderry is attracting an unusually high number of senior and single-person households.

For the past 10 years the only households coming into Londonderry have incomes in excess of the median income and far in excess of the average in the SNHPR. Strong working yearly income

housing & income profile

only
12%

of the housing stock in Londonderry and primarily consists of single family homes and small apartment buildings with fewer than 20 units.

\$300,900

Median Home Value in Londonderry

which is

12% Higher

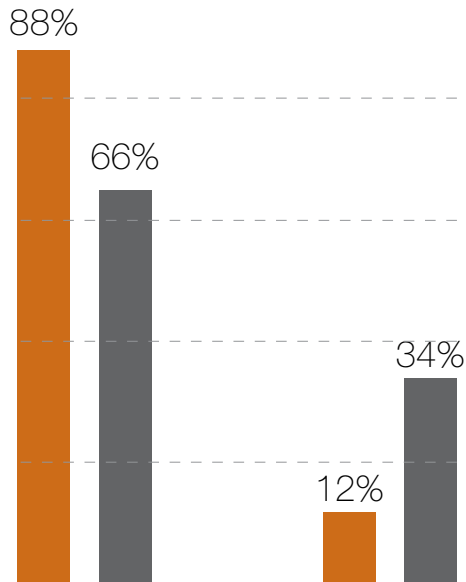
than all owner occupied homes in the SNH Planning Region

\$1,105

Median Rent in Londonderry

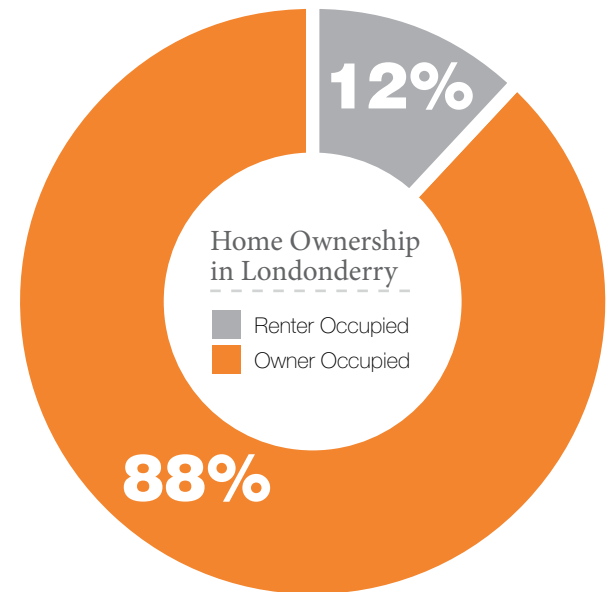
which is

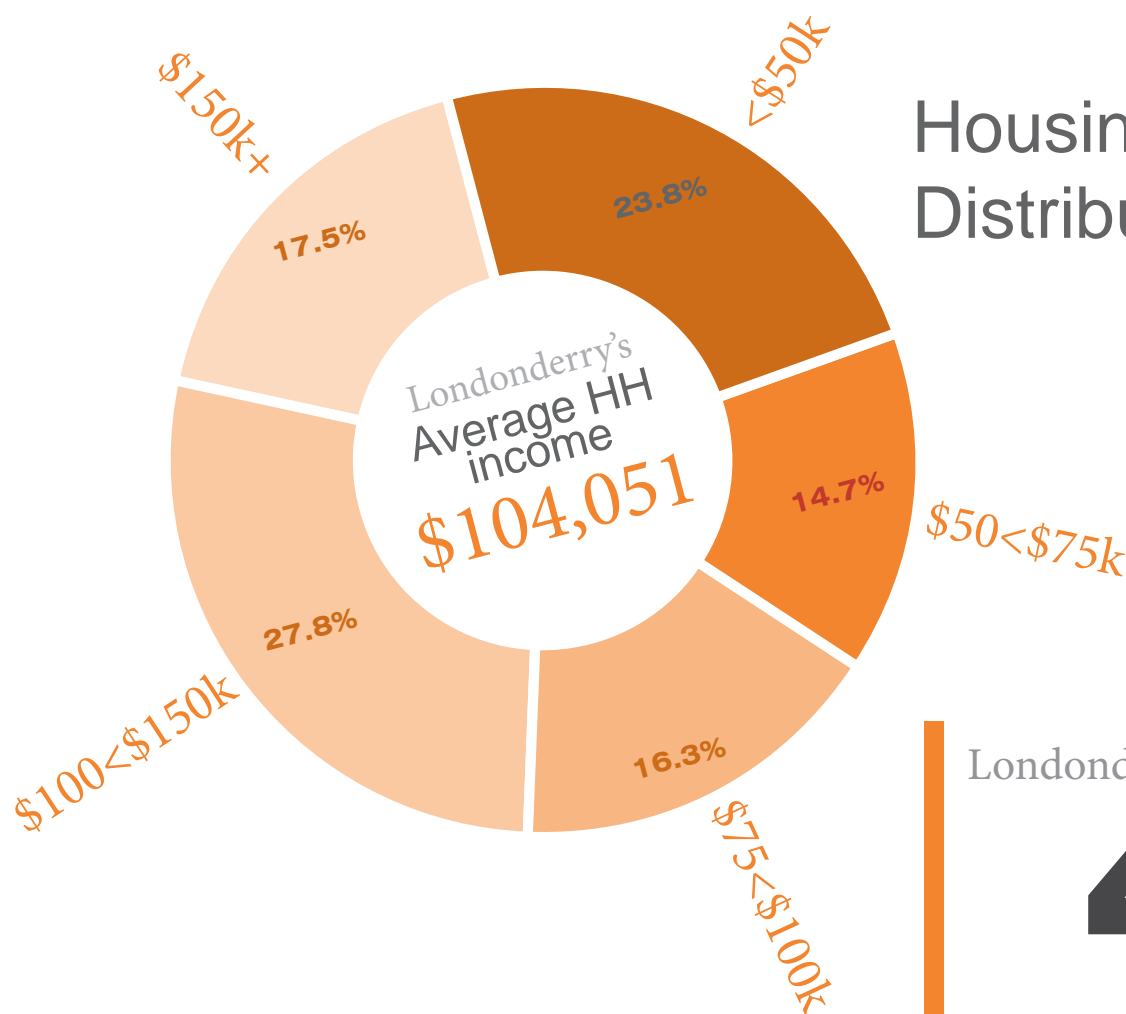
30% Lower
than in Bedford



% of Housing Owner Occupied % of Housing Renter Occupied

■ SNH Planning Region
■ Londonderry





Housing Income Distribution



Londonderry is the

4th

most affluent per capita in the Southern New Hampshire Planning Region

Insight:

Overall, household incomes in Londonderry are significantly higher than the SNH Planning Region as a whole, especially in comparison to Manchester and other suburban communities east of the city

Since spending behavior and household budget allocation is often dictated by the amount of income available to all members of a household (including children and other non-earners); from this perspective residents in Londonderry are relatively more affluent than their counterparts elsewhere in the region.

Per Capita Income in Londonderry
\$36,387

Household's w/income more than \$75k

61.5%

Londonderry

46.3%

SNH Region

Natural Resources & Open Space



Londonderry is defined in large part by the significant amount of open space serving the community as parkland, conservation areas, athletic fields, and agricultural lands. These areas allow residents and visitors to explore the natural beauty of the Town through wooded trails, marshlands, and ‘pick-your-own’ opportunities at local farms. When parkland, protected open space, and athletic fields are combined, there are 3,572 acres (14.2% of total land area) dedicated to some recreational purpose. Based on the 2010 census, there are 24,219 people living in Londonderry which means that the service delivery of active and passive recreational opportunity is 147.5 acres per 1,000 residents.

The maintenance and accessibility of each natural resource or open space varies since they are managed by different organizations. The Conservation Commission, assisted by Londonderry Trailways and other volunteer organizations, take

care of Town-owned conservation land and town-held easements. The Heritage Commission, with the help of the Londonderry Historical Society, maintains the Town Commons and Historic District. The Recreation Department and the School District share maintenance responsibilities for the athletic fields. And Rockingham County Conservation District currently has a contract to monitor the Sunnycrest, Ingersoll, and Merrill parcels. Londonderry Trailways has also taken the initiative to make these areas more accessible by working with the Town’s GIS staff to develop recreational maps, improve trail networks particularly in Musquash and Kendall Pond Conservation Areas, and add signage and bridges. Some areas are still largely inaccessible, allowing the area as a whole to remain natural.

Some open space in Londonderry is protected conservation area, while other space is privately owned. Out of the 26,945 acres that makes up

the Town, 42.8% of the land is part of the 2006 green infrastructure. From that study 3,647 acres were recorded as permanently protected and 2,801 acres partially protected. The remaining 5,104 acres were in private hands and unprotected. Thus, as of 2006, 55.8% of the open space and 23.9% of the Town is either permanently or partially protected. Updated information from the end of 2010 shows 400 additional acres were permanently protected and 1,404 additional acres partially protected. Conclusively, 30.6% of Londonderry was protected as of 2010.

Protecting open space is important because it provides space for collection of the clean water, recreation, and scenic views for Londonderry's residents and visitors. A number of local farms and conservation areas are already protected through agricultural easements and/or town ownership. Not all land in Londonderry with valuable natural resources is safe from development, however. Based on the 2010-2011 Open Space Task Force Final Report and using the Delphi ranking system, property in western Londonderry has the most natural resources and 40% of this land is currently available for development or protection. More specifically, the parcels of land that are most valuable in terms of both natural resources and favorable for development are located adjacent to the Musquash Conservation Area and in the Old Derry Road area. The Town is interested in protecting open space that connects existing green spaces together through important natural resource corridors as specified by the Green Infrastructure. Efforts should be taken to preserve these and other properties listed in the report.



open space profile



356
acres of active parks
3,000
acres of passive recreation
14.2%
of all Londonderry
available for recreation

For every thousand residents,



acres of open space is available for recreational activities.

When these recreation spaces are combined with all other natural land, Londonderry has preserved

over **30%**
of its total land area as protected open space.

Insight:

Londonderry provides a tremendous amount of recreational opportunities for its residents. These amenities help to preserve the unique character of the city. When combined with all protected open space, these resources give people terrific access to beautiful areas, bolster public health, and strengthen community



KENDALL POND CONSERVATION AREA

Kendall Pond Conservation Area includes nearly 60 acres along the Beaver Brook. The area includes a walking trail, scenic views and parking at the trail head. This area was protected in the early 1980's through a town appropriation matched by a grant from the Land and Water Conservation Fund. The primary use is passive recreation for bird-watching or quiet walks by neighborhood residents. The area contains 1 mile of managed trails.



LITTLE COHAS MARSH

Little Cohas Marsh contains 500+ acres of wetland habitat in the north-west area of Londonderry. The area was protected in the late 2000's through a series of easements and purchases by the NH Department of Transportation associated with the Manchester Airport Access Road wetlands mitigation. The area provides scenic views from Hall Road and vicinity, however there are no known trails or access points for public access.



BOCKES / INGERSOLL FOREST

The Bockes/Ingersoll Forest is protected by both ownership and conservation easements held by the Town and the Society for the Protection of NH Forests (SPNHF). The area was protected in the early 2000's and offers nearly 300 acres accessible to Londonderry, Hudson and Windham, consisting of parcels located and protected in each town. This area is perceived to be underutilized and a recommendation from the 2010 Open Space Task Force was to maintain and improve trails throughout the area to maximize recreational benefits.



MUSQUASH CONSERVATION AREA

The Musquash Conservation Area is Londonderry's largest conservation area and has expanded from an initial purchase of 500+ acres in 1978 to over 1,300 acres today. The area is protected by a patchwork of Town ownership and conservation easements held by numerous protective entities. The Musquash Conservation area has been the focus of extensive stewardship activities including creating/maintaining 14 miles of recreational trails, development of a forest management plan and carrying out activities such as trails work days and the annual Musquash Field Days.



SCOBIE POND

Scobie Pond is a 25 acre pond located in Northeast Londonderry. It is the largest open water body in Town and is located in an area of low development, with a largely undisturbed shoreline. Protection is afforded by two conservation parcels located along the eastern shore. Though the Town has a right-of-way access to the pond, there appears to be little use or awareness of the pond as a recreational resource.



ESTEY CONSERVATION EASEMENTS

A conservation easement including nearly 75 acres was secured at the southwesterly corner of Nashua Road (Rte 102) and Old Nashua Road in 2009. This easement provides protection of open fields and prevents development along sensitive streams and wetland areas in the busy Route 102 corridor. At present, no recreational investments have been made in the property.



MOOSE HILL ORCHARD

The Town holds an agricultural easement over this scenic and productive orchard in the center of Town that includes nearly 180 acres. The Mack Family and Londonderry Trailways have developed walking trails throughout the area for passive recreation in the summer and skiing/snowmobiling in the winter. In combination with the trails throughout the school facilities, the Moose Hill Orchard/Adams Pond area contributes roughly 11 of the 26 miles of mapped, public trails in town. The easement was purchased through passage of an open space bond. Whether appreciated as conservation land or not, this orchard and the surrounding public spaces are considered to be emblematic of the heart of Londonderry.



SUNNYCREST ORCHARD

The land comprising Sunnycrest Orchard (60 acres) is completely protected through a series of agricultural easement secured in the early 2000's. This action protected a working family farm and secured its place in the Londonderry community for years to come. Presently, no recreational investments have been made in the property however the current ownership includes such amenities as pick-your-own apples/strawberries/pumpkins, a small petting zoo and a farm stand for the purchase of locally grown fruits and vegetables.



WHAT WE HEARD

Many residents have chosen Londonderry as their home because of the natural resources and undeveloped open space. We heard about the beautiful views, the trails, the wildlife, and the farms. Residents want to continue to protect this open space and to have options for protecting agricultural land through easements. Residents are aware that allowing higher density in some areas will leave more land undeveloped. They know that open space can be a draw for new residents.

Natural Resources and Open Space Map

Transportation & Mobility

The transportation system in Londonderry includes streets, sidewalks, bike lanes, trails, an airfield, and limited transit service. Together, this system connects residents with their jobs, schools, and other destinations inside and outside of the Town. A brief summary of each major component of the transportation system follows.

Street Network

The street network includes a hierarchy of arterial, collector, and local streets focused on moving automobiles efficiently through the Town. Interstate 93 is a limited access freeway, which serves a dual role as long-distance travel corridor and in-town connector between nearby destinations. Major north-south arterial and collector routes in Londonderry include Rockingham Road (NH 28), Mammoth Road (NH 128), High Range Road, Hardy Road, and South Road. Major east-west arterial and collector routes include Rockingham Road (NH 28), Litchfield Road, Stonehenge Road, Wiley Hill Road, Pillsbury Road, and Nashua Road (NH 102). Nearly all major streets are two lane facilities with center left turn lanes at major traffic generators. Only Nashua Road is a multilane facility (four lanes) with center left turn lanes. Miles of two-lane, local neighborhood streets typically dead end in cul-de-sacs.

Existing traffic volumes in the planning area are highest on four primary throughways: Interstate 93, Rockingham Road, Mammoth Road, and Nashua Road. Other streets in the planning area carry only modest traffic volumes. None of the streets in the transportation network exceeded their average daily trip capacity based on a generalized link analysis using 2011 daily traffic volumes.

Sidewalks & Bike Lanes

Sidewalks and bike lanes in the existing transportation system are non-existent. There was overwhelming agreement among participants of Planapalooza for making Londonderry more walkable. The typical street section in the Town's subdivision ordinance does not require sidewalks or bike lanes; nor does the subdivision ordinance require sidewalk construction beyond the discretion of Planning Board. A typical street section for minor streets in the subdivision ordinance does show the placement and construction requirements for a sidewalk on one side of the street; however, the inventory and assessment completed for the transportation system to support the comprehensive master plan did not find widespread application of this standard in previous road building.

Trails & Greenways

The system of trails and greenways in Londonderry provides opportunities for residents to walk, bike, cross-country ski, or snowshoe in the Town. The existing network is limited to three general areas: Town Center, Musquash Conservation Area, and the Londonderry Rail Trail (currently under design). Each area provides its own system of paved, unpaved, or informal trails to meet



Thoroughfare Network Map

recreation or non-motorized transportation needs. Overwhelming support for the trail and greenway system is provided by elected officials, residents, and nature enthusiasts in town.

Londonderry Trailways is an all-volunteer group formed in 1999 to increase and improve the quantity and quality of trails and greenways in the planning area. The work of this group has been instrumental in building and maintaining the existing system, and making plans to expand its reach through



Thoroughfare Network Map

their own funding, education, and agency partnering initiatives.

Airfield

The Manchester-Boston Regional Airport is a gateway to Southern New Hampshire, providing residents of Londonderry with convenient access to several national and international destinations. Airport statistics report nearly 1 million passengers and 34,010 tons of cargo arrived and departed from the airport in 2011.

Recent improvements at the airport include the opening of the new Airport Access Road in 2011; providing access to more than 1,000 acres of land set aside for commercial and industrial development south of the airport. Ultimately, this road will connect into the new Pettingill Road planned as a major east-west connector in the area.

Public Transit

Public transit service in the planning area is limited to demand service (a.k.a. dial-a-ride) provided by the Cooperative Alliance for Regional Transportation (CART). A park-and-ride lot at Nashua Road near Interstate 93 offers residents regional transit service via the Boston Express to South Station and Logan International Airport.

Emerging Trends

Large blocks, low street connectivity, and single-point entry and exit points to the street network contribute to an overreliance on the automobile for meeting daily travel needs; particularly since

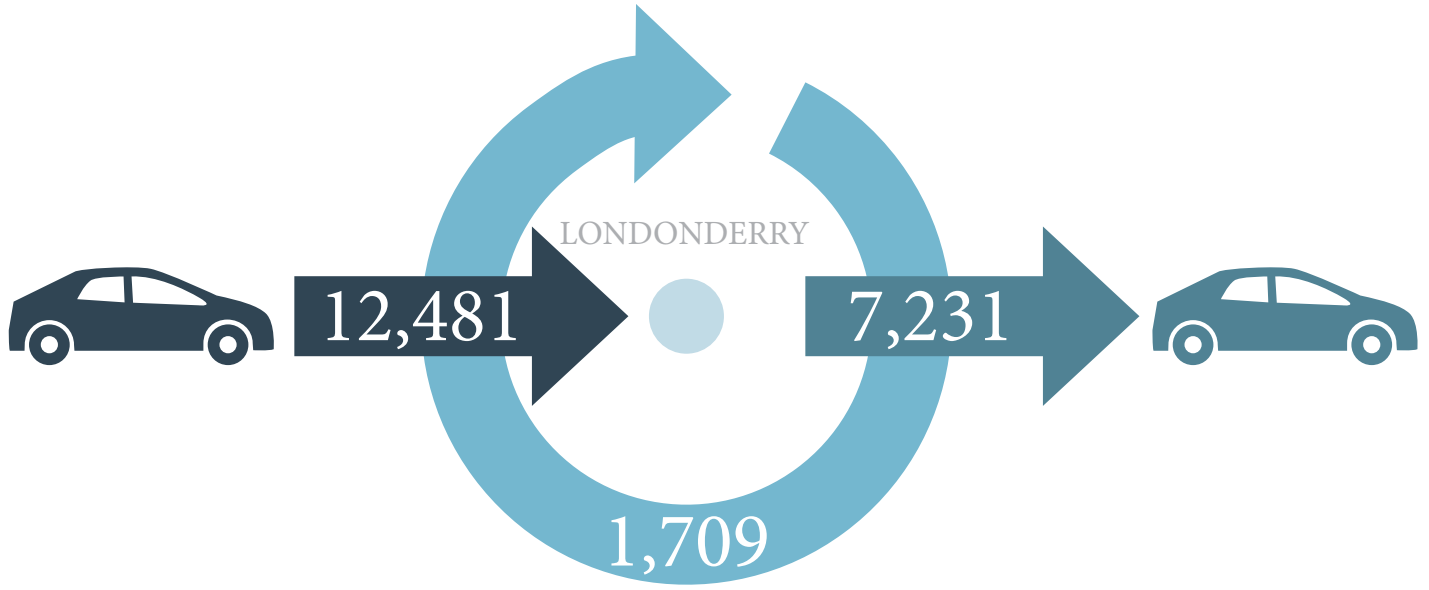
safe, convenient pedestrian or bicycle facilities and access to public transit are so limited within the town. Future year traffic volumes generated by new development will contribute to greater congestion on these streets and potentially expensive capacity building projects. Increased traffic volumes on the existing street network could also mean longer travel times, greater delay at key points in the system, and potential decrease in quality-of-life for residents spending more time in their vehicles.

For these reasons, participants in Planapalooza advocated for a more sustainable transportation system predicated on providing viable transportation alternatives and implementing complete street design principles.

WHAT WE HEARD

Residents have said that Londonderry is currently not very walkable. The roads and large intersections don't seem safe for walkers or bikers; particularly Nashua Road (NH 102). Some residents suggested simple fixes to these problems such as painting crosswalks. Many residents mentioned additional paths that connected schools and neighborhoods. Overall, residents want walking and biking in Londonderry to be easier and safer.

labor commute patterns



Unlike most suburban jurisdictions near the New Hampshire/Massachusetts border

more than **1 1/2** times as many people commute to Londonderry to work as residents that leave Londonderry to work elsewhere.

Insight:

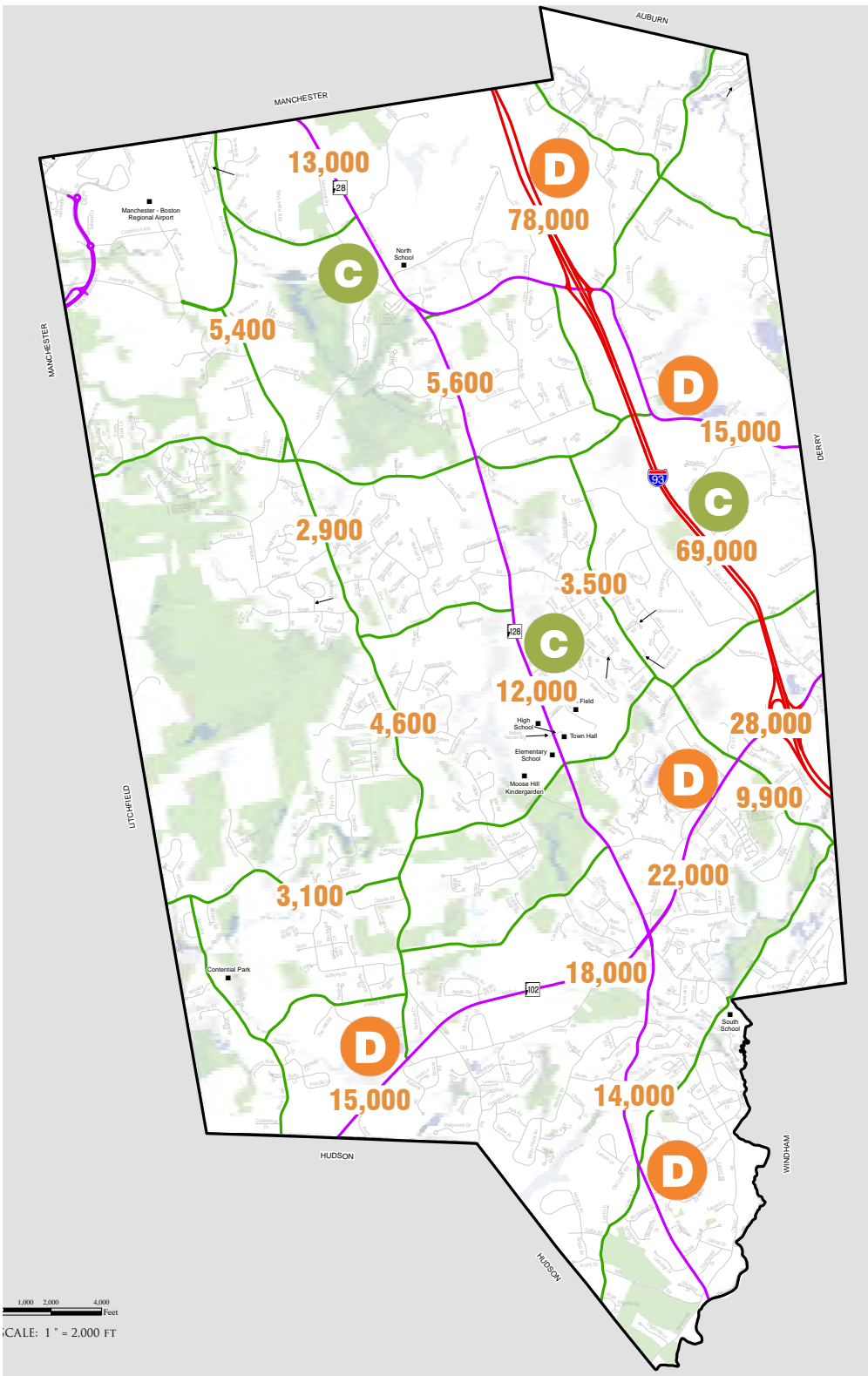
Housing in Londonderry is so expensive that those who work in Londonderry have to live in neighboring municipalities because they can't afford to live in Town.

only

1,709 of the **24,129**

people who live in Londonderry work in Londonderry.

these local workers representing only **14%** of the town's worker population



LEVEL OF SERVICE & TRAFFIC COUNTS

In spite of the fact that the county does not have Level of Service (LOS) standards, the thoroughfare network in Londonderry functions exceptionally well. The lowest LOS in the Town is D which still maintains a stable flow of traffic. It is important to remember that LOS is not related to the grading system people are familiar with in the academic world. For instance LOS C, which is found on many of the main thoroughfares in Londonderry like Mammoth Road functions exceedingly well. Another point to remember is that LOS does not include all modes of transportation in its valuation. Only automobiles are accounted for meaning that thoroughfares this higher automotive LOS may be substandard or even failing for pedestrians and cyclists.

Level of Service A:

Free-flow traffic with individual users virtually unaffected by the presence of others in the traffic stream.

Level of Service B:

Stable traffic flow with a high degree of freedom to select speed and operating conditions but with some influence from other users.

Level of Service C:

Restricted flow that remains stable but with significant interactions with others in the traffic stream. The general level of comfort and convenience declines noticeably at this level.

Level of Service D:

High-density flow in which speed and freedom to maneuver are severely restricted and comfort and convenience have declined even though flow remains stable.

Level of Service E:

Forced traffic flow in which the amount of traffic approaching a point exceeds the amount that can be served. LOS F is characterized by stop-and-go waves, poor travel times, low comfort and convenience, and increased accident exposure.

Level of Service F:

Unstable flow at or near capacity levels with poor levels of comfort and convenience.

Infrastructure & Municipal Services

Water Service

Three water utility companies provide potable water service to the Town of Londonderry; including the Derry Water Works Department, the Manchester Water Works Department, and Penichuck Water Service Company. Water source locations for all three utility companies are located outside of the Town of Londonderry.

Londonderry's northern service area includes the Manchester-Boston Regional Airport and industrial parks immediately south of the airport. Distribution mains along High Range Road, Litchfield Road, Mammoth Road, Rockingham Road, Auburn Road, and Old Derry Road serve select residential, commercial, and industrial areas in the close proximity.

The central service area extends along Mammoth Road, Pillsbury Road, Nashua Road, Gilcrest Road, and Kendall Pond Road to serve select residential and commercial uses. Other isolated service areas (e.g., one or two streets in a residential subdivision) are spread throughout the planning area. Homes and businesses outside the designated services areas use private wells to satisfy for their potable water needs.

Sewer Service

The Town of Londonderry operates a collection and interceptor sewer system in the planning area, which drains to the Manchester Wastewater Treatment Facility or the Derry Wastewater Treatment Facility for treatment and disposal. The northern service area leads from the town center campus on Mammoth Road to residential, commercial, and industrial points north. Waste from the system is treated by the Manchester Wastewater Treatment Facility.

Currently, the Town reserves capacity with the City of Manchester through an inter-municipal agreement for the treatment of 3.0 million gallons per day (MGD) at the facility. Town officials report an average daily demand of 1.67 MGD (2005 statistic) based on existing land uses patterns and development intensities in the service area.

The southern service area extends along Nashua Road (NH 102) from Interstate 93 to Constitution Drive, expanding to include residential and commercial uses in the Gilcrest Road area. Waste from the system is sent via a pump station at Charleston Avenue to the Derry Wastewater Treatment Facility. Currently, the Town reserves capacity with the Town of Derry through an inter-municipal agreement for the treatment of 0.33 million gallons per day (MGD) at the facility. Town officials report an average daily demand of 0.085 MGD (2005 statistic) based on existing land use patterns and development intensities in the service area.

There is also a small, privately-owned sewer collection system in the Mill Pond Development, which flows north to the Manchester Wastewater Treatment Facility. The demands of this system are included in the inter-municipal agreement with the City of Manchester for sewer treatment capacity.

Large portions of the planning area are not served by public sewer. These properties rely on privately-owned septic systems with a subsurface disposal field. Most properties served by a septic system are residential homes; however, some commercial buildings also use a septic system for the treatment of wastewater. The Town of Londonderry collects effluent from private

septic systems for disposal at the Manchester Wastewater Treatment Facility. Town officials report approximately 1.8 million gallons of septage per year is collected based on existing land use patterns and development intensities outside the public or private sewer service areas.

Fire Protection

The Londonderry Fire Department provides fire protection and emergency medical services to the planning area with resources from one of three stations: Station One, Station Two, and Central Station. Each station supports a “first run” engine company and forestry unit. Central Station also supports a rescue truck, two ambulances, a command car, and aerial platform truck. Fifty one full-time and two part-time employees serve the fire department in one of five divisions: administration, operations, fire prevention, communication, and technical services.

Resources of the fire department were used to respond to 46 fire protection calls, 1,844 emergency medical service calls, and 117 hazardous conditions calls in 2011. Another 1,228 service calls were made in the same year. The monetary value of saved or lost property at fire incidents exceeded \$500,000 in 2011.

Police Protection

The Londonderry Police Department maintains peace and order in the planning area. It operates out of the headquarters building at the town center campus on Mammoth Road. Eighty-one full time and seven part-time employees serve the department in one of four divisions: administration, operations, airport security, and special services. The police department also sponsors several community programs in the planning area; including neighborhood watch, college internships, bike rodeo, and senior volunteers among others.

Resources of the police department were used to respond to 26,335 incident dispatches in 2011. Circumstances at the incidents resulted in 3,077 police reports and 10,153 vehicle summons. 760 arrests and 925 vehicle accidents were handled by the police department in 2011.

School System

The Londonderry School District is autonomous from the Town of Londonderry but very important to its residents. The school system includes six schools: Londonderry High School, Londonderry Middle School, Matthew Thornton Elementary, North Londonderry Elementary, South Londonderry Elementary, and Moose Hill Kindergarten. The enrollment at all schools was 4,845 in the 2011/12 school year.

Statistics reported in the District’s Accent on Achievement Report for 2012 continue to outperform the State of New Hampshire in several categories: student retention, post-secondary education attendance, per pupil average cost, and standardized test scores. Participants at Planapalooza continually ranked the school system as one of the biggest contributors to a high quality-of-life for residents in Londonderry.

Continued coordination between the Town and School District will ensure efficient and high-quality services into the future. Specifically, the timing and location of new development influenced by the comprehensive master plan and the zoning ordinance (i.e., Section 1.4 – Growth Management & Innovative Land Use Control) should be closely coordinated with the District’s strategic plan and capital investment plan.

WHAT WE HEARD

Many residents are seeking improvements in utilities service. We heard about power outages and the need to upgrade the power stations. Some stated that Londonderry may need to consider expanding sewer service in the Town. Residents see the necessity of improving and extending utilities, but are also concerned about the associated costs. Residents also mentioned the possibility of building new parks, and other amenities as well as overwhelming support for the construction of a new auditorium.

Cultural & Historic Resources

Londonderry is a community that strives to preserve local history and culture in order to maintain a connection with its past and rural heritage. Organizations like the Londonderry Historical Society, Historic Properties Preservation Task Force, and the Morrison House Historical Museum are actively involved with finding, sharing, and preserving artifacts representing their history. Here, residents and visitors alike can learn about what defines Londonderry, both past and present. Events and activities are also hosted by the Town - including Old Home Day, numerous sporting events, and camps - which encourage continued interest and involvement in Londonderry. Such events are made possible because of places like the ball fields, parks, and the Town Common, set aside to accommodate these and other functions. Many groups, clubs and church congregations exist as well, encouraging residents to further find their place in the community.

Historic Resources:

Londonderry has successfully preserved local history by setting up organizations to protect important historical items and structures. Such objects and places remind residents of the Town's history and encourage local pride. These organizations remain a useful resource as the community continues preservation efforts that will inform future generations.

The Londonderry Historical Society was formed in 1956. In 1968, it was incorporated as a non-profit organization. Developed to preserve Londonderry's past, it collected and stored artifacts while maintaining the Morrison House Historical Museum. The museum is made up of three historical structures—the 18th century Morrison House, the 19th century Clark Black-

smith Shop, and the Parmenter Barn (which was the last barn in Londonderry assembled through community barn-raising)—all of which were relocated from their original sites to Pillsbury Road. Showcased by the museum are items related to Londonderry's industry of flax and linen, 19th century tools, and a reproduction forge which authentic leather and wood bellows. It sits on over 2 acres of orchard land whose original deed belonged to Charter David Morrison and was donated by the Mack family. As the Londonderry Historical Society continues to support this important collection, the museum will remain a great way to educate visitors about the area and grow as Londonderry develops.

Established by the Town Council in 2006, the Historic Properties Preservation Task Force was formed to develop a list prioritizing historic buildings and cultural resources to be protected from demolition or development to better preserve the Town's history and cultural character. They developed criteria for defining what characterizes a historic structure or site in Londonderry. From this, it was determined that 141 properties qualified as sites for preservation. The 2007 Historic Properties Preservation Task Force Report lists the recommendations to the Town Council to preserve these sites and a map showing such properties can be found in the 2010-2011 Open Space Task Force Final Report.

The Historic District was set up to protect elements of Londonderry's history and guide future development so that consistent character of historic properties is maintained. Currently, this district includes four lots at the intersection of Pillsbury and Mammoth Roads. Grange Hall, United Methodist Church, Londonderry Presbyterian Church, Lion's Club, and Londonderry



Commons are located at this intersection. Open space here, which is considered the center of town, contains monuments dedicated to veterans of the Revolutionary, Civil, and World Wars. The townspeople built a bandstand that was dedicated, along with the memorial to the Londonderry 99 from the Revolutionary War, during the town's Bicentennial Year—1976. Located diagonally across the intersection from the Common, Grange Hall was built to be used in conjunction with farming after the National Grange Order of Patrons of Husbandry began in 1867. This historic building was built in 1909 and added to New Hampshire historic registry in 2004. With its original interior and cedar shingles, it is now used for wedding receptions, concerts, and local meetings. Efforts are being made to raise funds to re-shingle and update plumbing since it has no running water. If the Town developed in a more walkable fashion around this important space—the Londonderry Common and historic buildings surrounding it—it could become a place that is used not only for special events, but also daily.

Cultural Resources:

Londonderry provides access to a variety of events and activities both for daily life and special events that influence its unique culture. The Recreation Department offers many options for community members of all ages to be involved with sports and summer camp programs. The high school band and other music groups are brought in for entertainment to supplement shopping and dining opportunities. And once a year since 1899, Old Home Day is faithfully observed on the third weekend in August. This long-standing New Hampshire tradition is a family celebration that attracts over 12,000 people for concerts, fireworks, parades, contests, exhibits, talent and music shows, and church services. Sports leagues drive community life in Londonderry, so to accommodate this activity about 77 acres is maintained by the Town and designated as recreational land. Between the Nelson Road Complex, LAFA Complex, and West Road Continental Park there are baseball, softball, soccer, and multipurpose fields; a playground; tennis and basketball courts; and a skateboard park. This

recreational land is utilized by town residents and maintained through various groups and organizations like the recreation department, MOMs group, and LAFA group, with investment from the youth soccer groups and SAU. In order for Londonderry to preserve cultural identity regarding activity importance, similar amounts of land must remain dedicated to recreational purposes, especially athletic fields.

Besides sports, there are many opportunities for Londonderry residents to be part of a group that caters to personal interests. There are 17 different places of worship plus numerous clubs and organizations formed for either recreation, entertainment, or community service purposes. As Londonderry develops a sense of place and maturity, especially around the Town center, existing and new events or activities will have the chance to thrive.

WHAT WE HEARD

Londonderry residents are concerned about preserving historic buildings. They know the importance of preserving those buildings, and want to have incentives for that. They want to take advantage of the uniqueness of those historical buildings - particularly buildings on the main road. Some mentioned that the city should find ways to make it easier and more affordable to save and rehab a historic building.



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considering alternative futures

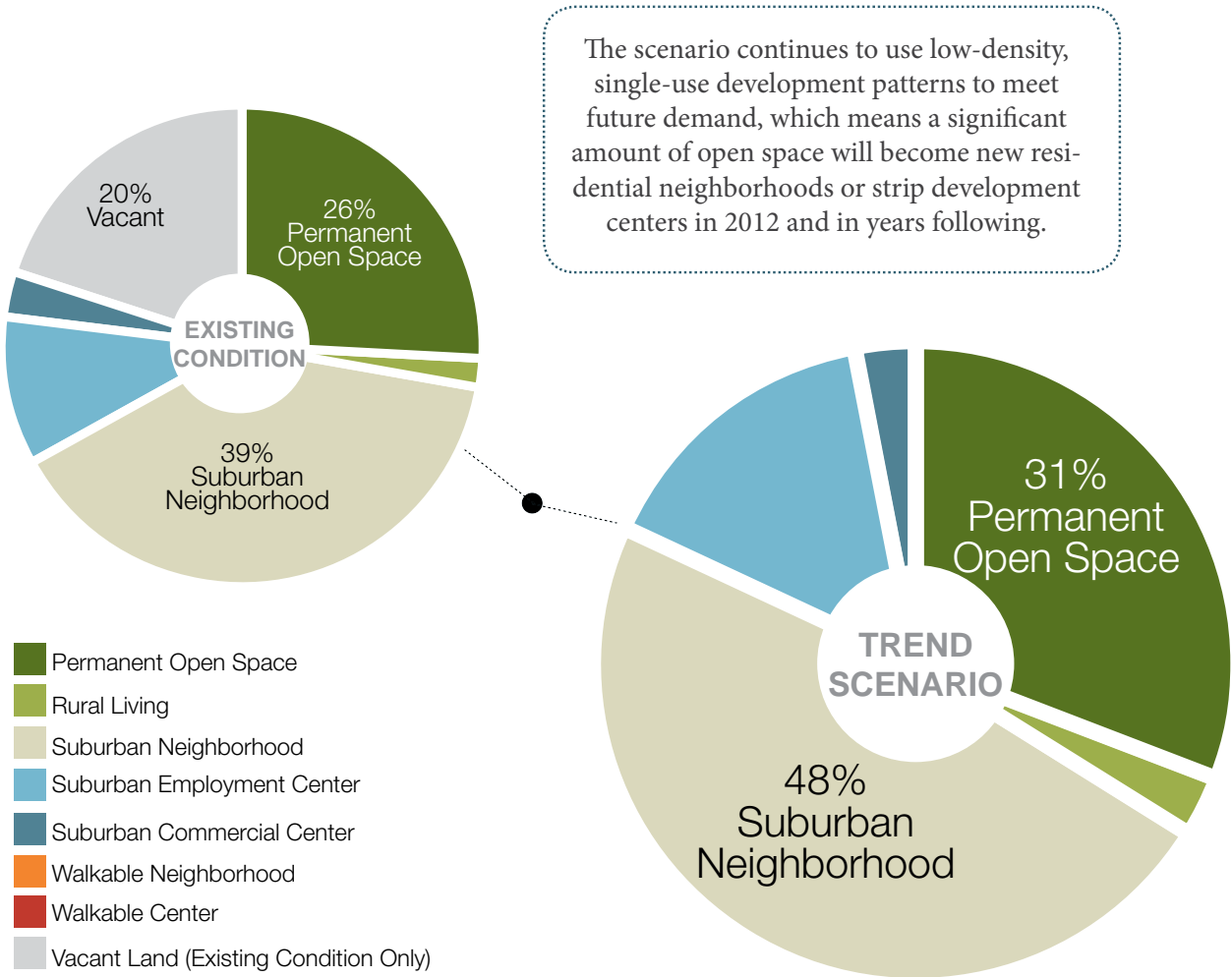
How should we grow? Where should we grow? Are we still proud of where we live? These were some of the questions discussed during Planapalooza. Participants were asked to contemplate two alternatives. One scenario reflected the status quo and a future where the Town is built-out as allowed under adopted plans and policies. This scenario helped to evaluate whether this potential future is consistent with the Town's stated vision and guiding principles developed during Planapalooza. Participants were also asked to consider a possible alternative growth scenario that might better provide diversity and choice for residents, protect natural areas, and create civic life.

Considering An Alternative Future

Trend Development Scenario

The trend development scenario contemplates how the Town would build out if the dispersed pattern of residential and non-residential development were to continue. New growth would continue to appear as single-use, low-density development that is generally isolated or not well-connected. Common features of the scenario include: greenfield development patterns, outward expansion of public utilities or very low development densities and intensities to support septic systems, and transportation investments that favor convenience for automobile users.

The trend development scenario followed closely the Town’s existing comprehensive master plan, zoning ordinance, and subdivision ordinance, as well as past trends to rezone rural areas for new low-density residential subdivisions with cul-de-sacs. Typical market and development forces in the Town support continued build-out under this scenario.



Only two growth scenarios were studied for the comprehensive master plan based on response heard from the community during the Planapalooza event. These include trend development and villages and corridors. The details of each are summarized on the following pages.

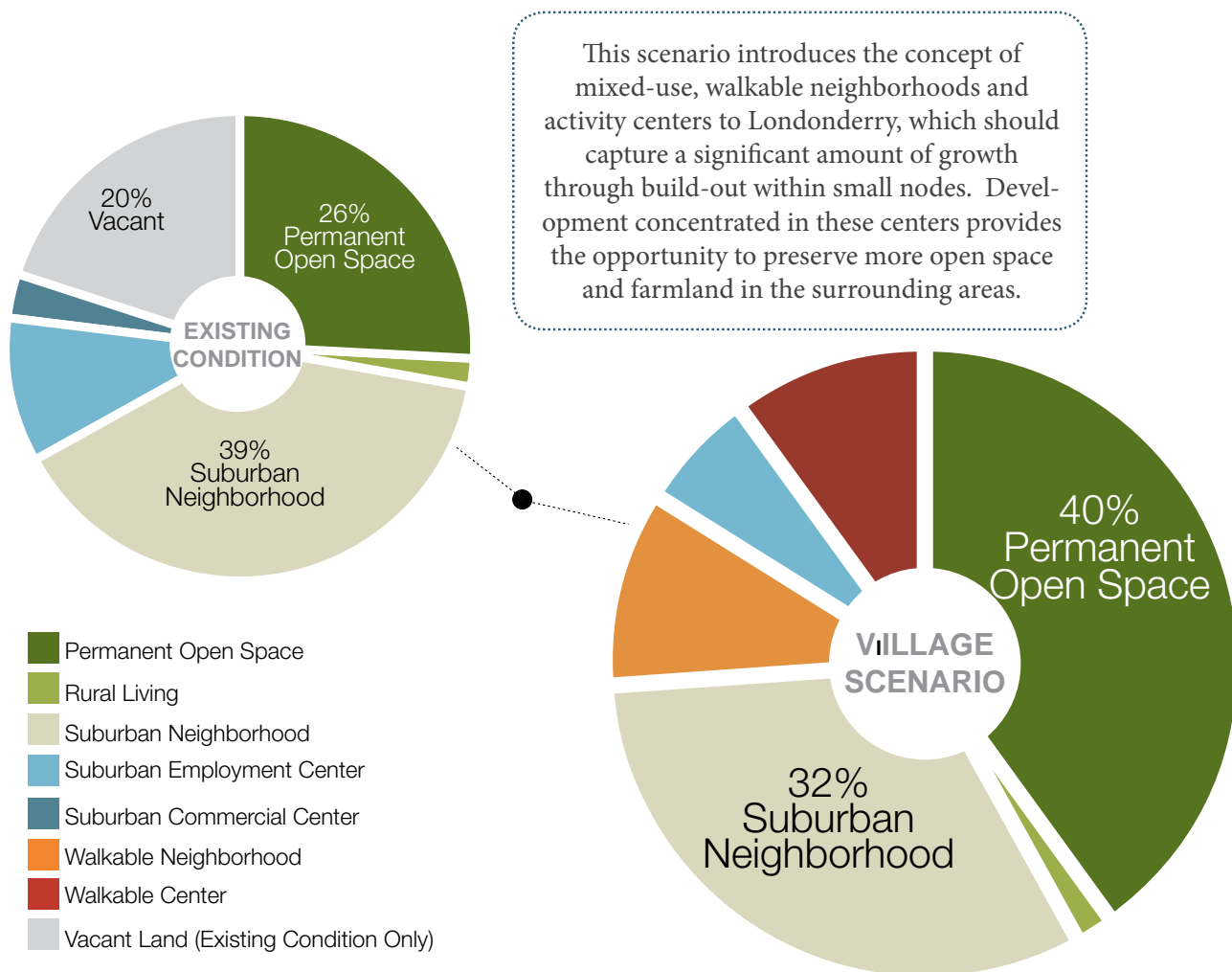
Villages & Corridors Scenario

The villages and corridors scenario contemplates how the Town would build out if new growth were focused into more compact, walkable neighborhoods with nearby opportunities to live, work, shop, and engage in civic life. Development in the centers and the primary corridors between them would vary in scale, use, and intensity, ranging from rural hamlets to neighborhood centers. By encouraging new development in these designated areas, more land could be preserved for open space or agriculture uses.

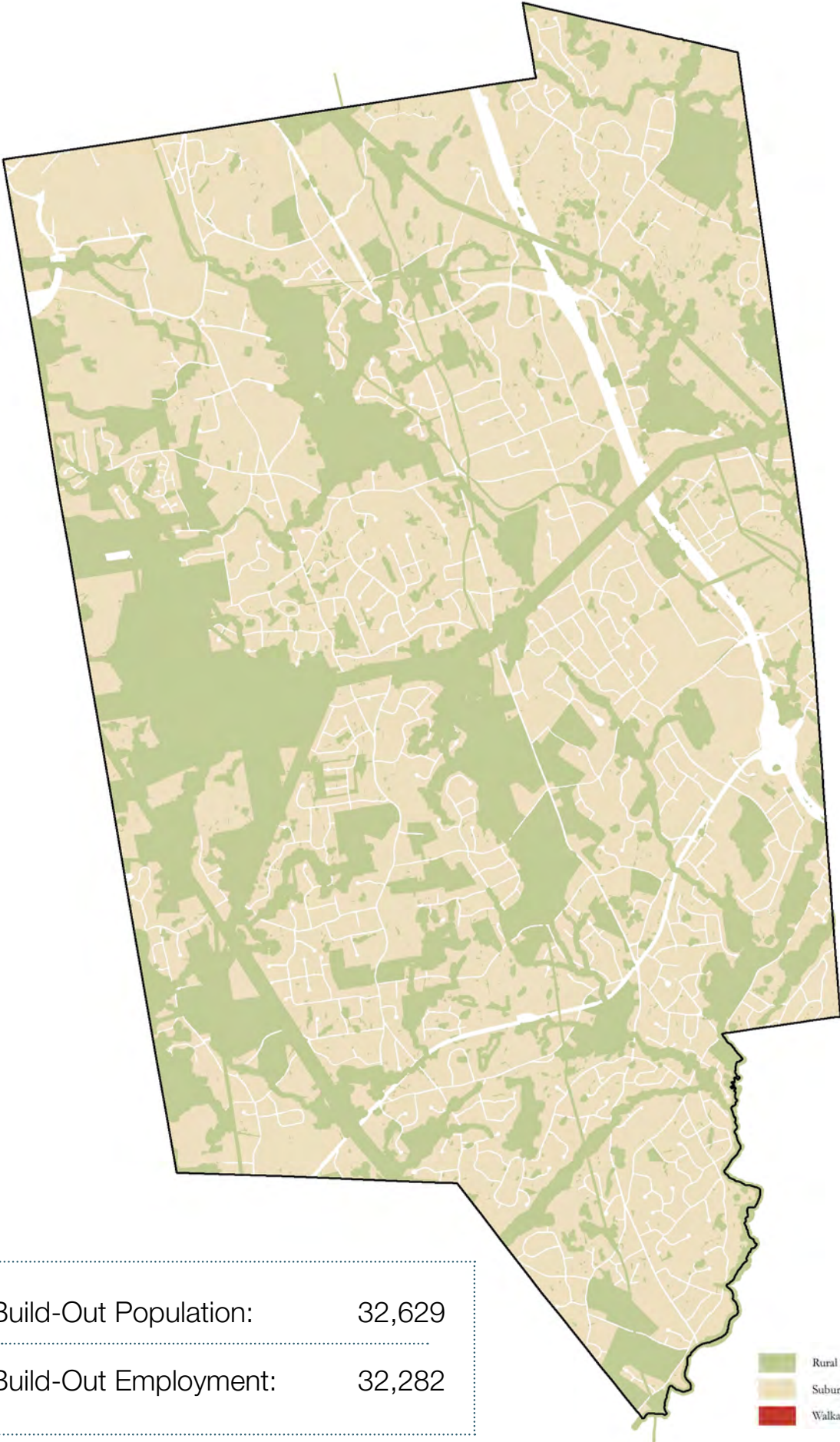
Common features of the villages & corridors scenario include walkable activity centers, greater land preservation, a better variety of development

types and intensities, new public spaces inside new centers, and more travel options for daily travel needs. Existing low-density residential neighborhoods would remain untouched in the alternative development scenario. Strip commercial development would also remain as it was built today but would be encouraged to phase into a more walkable environment over time as people reinvest in their property.

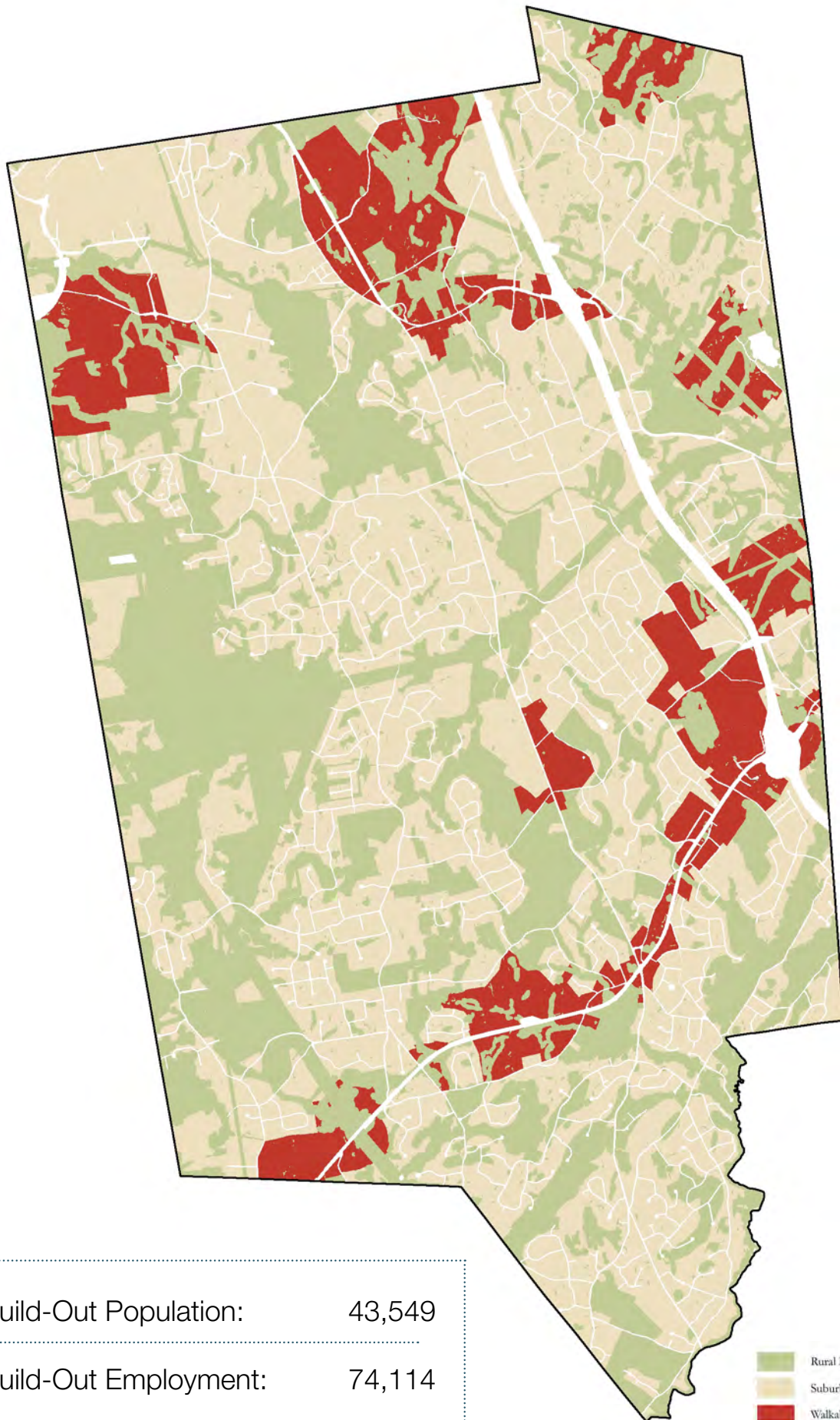
The villages & corridors scenario would direct market forces, providing a greater degree of choice while closely responding to market-driven realities.



Trend Development Scenario



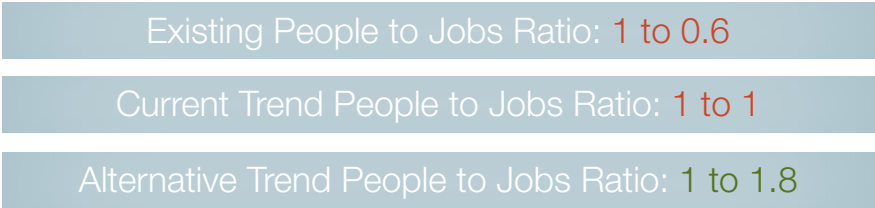
Villages & Corridors Scenario



Considering the Alternatives

Because both scenarios assume that all vacant land is converted into productive space, it is only natural that growth would also bring more people to the town. As new families arrive, the town's economy must also provide opportunities. Under the current trend, business-as-usual will provide an increased share of jobs to the area compared to what is seen today. However, in the alternative scenario, new areas of more compact development would provide increased opportunities for development, leading to more commercial sector growth, and a tripling of jobs.

Comparing the growth scenarios side-by-side provides one opportunity to highlight strengths and weaknesses in how each alternative measures up against the community's stated vision and timeless principles. Below is a summary of key information for evaluating the two growth scenarios.

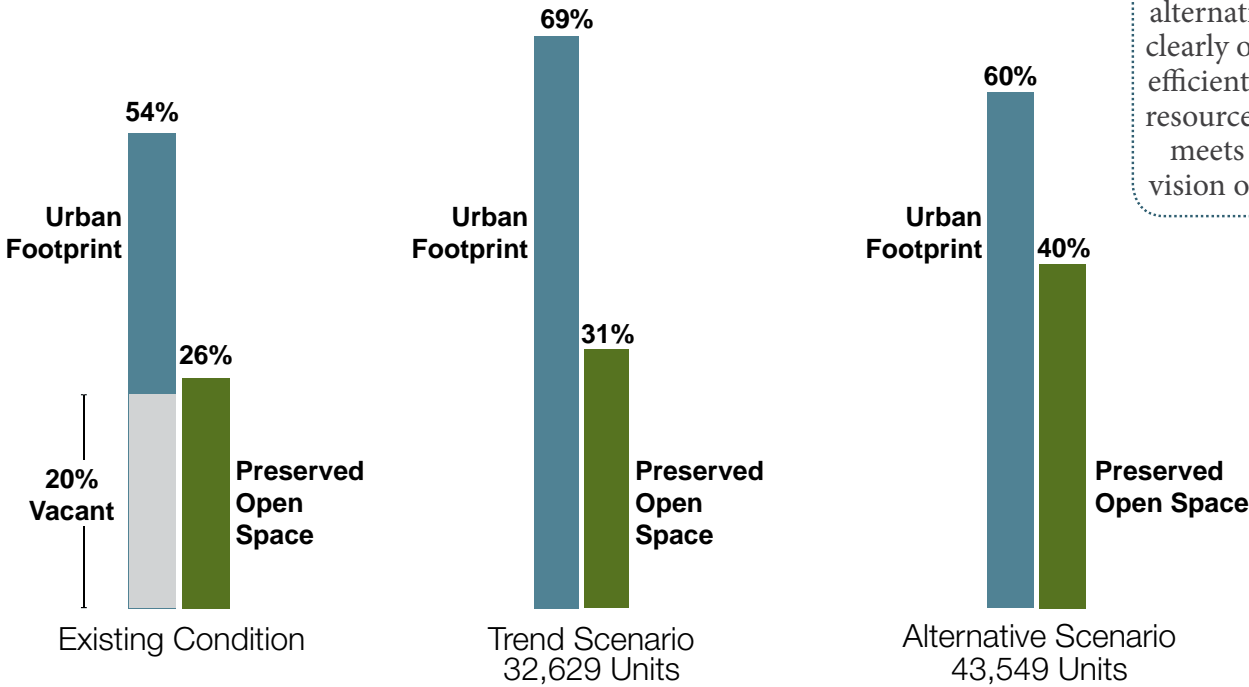


The Alternative Trend will create **3x the jobs** for the City of Londonderry, creating one of the most competitive labor markets in New Hampshire

Land Saved, Options Created

Likewise, in the current trend, suburban development consumes more land for less units while the alternative provides a greater balance of development and open space.

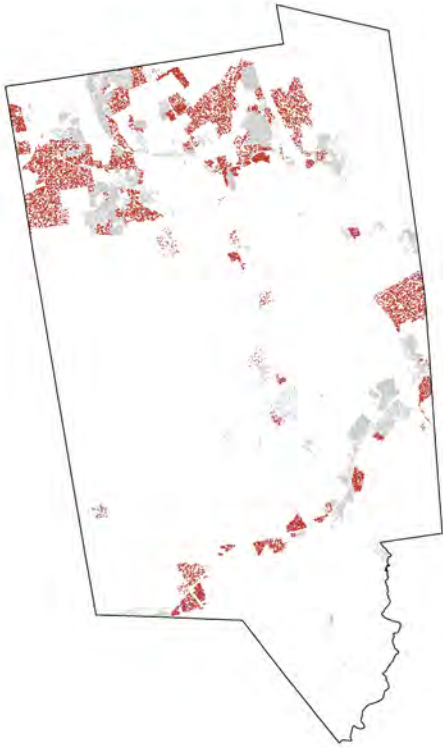
When all factors are combined, the alternative scenario clearly offers a more efficient use of local resources and better meets the town's vision of the future.



Trend Development Scenario

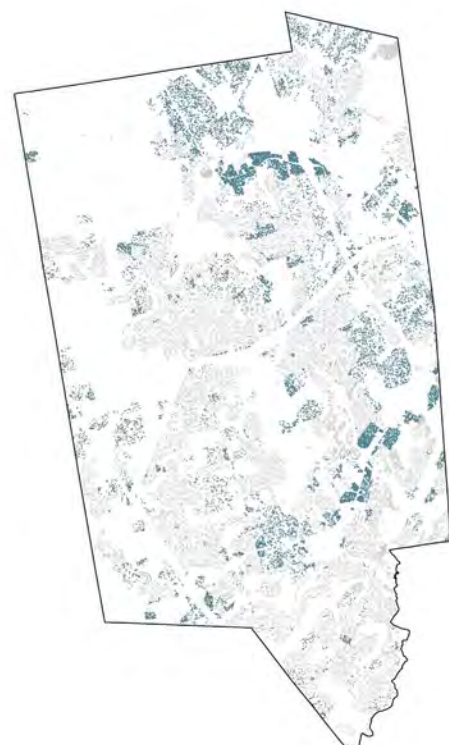
Villages & Corridors Scenario

EMPLOYEES



The villages and corridors growth scenario could support almost three times the amount of employment compared to the trend development scenario. This advantage occurs while preserving nearly 10% more land in permanent or reserved open space.

POPULATION



The villages and corridors growth scenario could support up to 33% more people compared to the trend development scenario. This advantage occurs while preserving nearly 10% more land in permanent or reserved open space.



the toolkit

This tool kit is intended to be a source for concepts, ideas and actions related to the future of conservation and growth in Londonderry. The document works as a kit of parts, each able to be utilized on its own or as part of a cohesive application of several tools. The Toolkit is organized based on the five guiding principles of the Master Plan. While there was overwhelming support for the guiding principles and plans generated during Planapalooza, there were still some areas of discussion where consensus was not as clear. The Toolkit is an excellent methodology for dealing with those areas as well. Over time, the citizens of Londonderry can decide which tools they want to implement and which they don't. Some tools might be readily accepted today, while others may be too progressive for current views and will find their supporters in future generations. In the Toolkit there is something for everyone because we know in Londonderry there is not a one-size-fits-all solution.





forever green

Keep Londonderry Forever Green

Create an interconnected network of green space.

Promote sustainable stormwater solutions that contribute to the beauty of the public realm.

Encourage energy-efficient design in new construction.

↑ tools ↓

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- | | |
|---|--------------------------------|
| Urban Agriculture | Green Roofs and Walls |
| Reduction of Stormwater Infrastructure | Energy Efficient Design |
| Maintain Existing Hydrological Patterns | Shade Trees |
| Green Streets | Solar Orientation |
| Bioswales | Natural Light |
| Rain Gardens | Ventilation & Air Conditioning |
| Infiltration Parks | Greywater Recycling |
| Pervious Parking Lots | Rain Water Harvesting |
| Green Plazas | Xeriscaping |
| Staircase Cascade | Conservation Subdivisions |
| Green Bike Path | |

Urban Agriculture

Raising vegetables, fruits, herbs, and meat, coming together to prepare and store food, and sitting around a table and sharing a meal are fundamentally acts that bring us together as a community. There are many reasons that draw people to the practice of urban agriculture, including self-sufficiency, tradition, recreation, saving money, a sense of security, exercise, activism, and a way to get outdoors, connect with family and neighbors, and put long held values into practical action.

As the cost of food and fuel increases there is mounting concern about food security and the availability of consistent and reliable access to food. Because the majority of food for the average American travels about 1,500 miles from the farm to the plate, most families, other than those who live on or near a farm, are in jeopardy if there is a disruption in the long distance food shipping supply chain. Then there is the question of food – is it good for you, is it safe, is it fresh, is it nutritionally balanced food that you can afford?

Londonderry would benefit in many ways from making a commitment to an equitable, healthy, and sustainable food supply through urban agriculture. In doing so, the Town can strengthen a local food system grounded in community and linked to rapidly developing state and regional efforts.

Londonderry is already home to a small community of local food practitioners. However, local food production is not relegated solely to the large family farm. Backyard homesteading, rooftop gardens, and schoolyard gardens are all part of a growing trend in which individuals, families, and communities seek to grow or locally source as much of their own food as practical, limiting input from outside sources.

With thoughtful planning and innovative techniques, agriculture can continue be infused throughout the Town from rural farms to the window boxes of commercial buildings.





PERI-URBAN FARMS

Farms producing food on relatively large areas of open land within the town limits.



COMMUNITY GARDENS

A private, not for profit, or public common area used by a group of households to grow and harvest food crops or non-food crops for personal or group consumption or donation.



www.cityfarmer.info

SCHOOLYARD GARDENS

Schoolyard gardens can be used as a tool to integrate classroom curriculum with an outdoor hands-on experience, environmental education, culinary arts, and nutrition.



YARD GARDENS

These are appropriate for use on residential lots for household use by the residents.



www.takeawalk.com

CONTAINER GARDENS

These gardens utilize containers to hold the planting medium and include window boxes, balcony, and roof gardens. They can be used to provide household produce needs in more urban areas where space is limited.



EDIBLE LANDSCAPES

This refers to the utilization of plants and landscaping that produce edible food in settings that conventionally would have been limited to ornamental or non-food producing plants. Edible landscapes are not a farm or garden per se, and unlike the farms and gardens described above, are not limited to use on private lots. Plantings on public property, including parks, present great opportunities for flower and vegetable gardening, as well as the planting of fruit trees.

Reduction of Stormwater Infrastructure

Conventional infrastructure used to maintain the suburban lifestyle is often oversized, designed to handle the worst possible scenario. This is costly to install and maintain and has a negative impact on the environment. It is for these reasons that a sustainability strategy should begin with finding ways to reduce dependence on complicated infrastructure systems to meet our daily needs.

The most environmentally sensitive method for dealing with stormwater is also least expensive — the reduction of impervious surfaces. Automobile dominated sprawl development has made stormwater management more difficult and expensive, as has resulted in increased impervious surfaces in the form of wider roads and large parking lots.

In the past few years, there has been a push to deal with stormwater in a more sustainable way in order to reduce infrastructure needs and protect ground water. One of the first attempts was known as Low Impact Development (LID). While LID

was based on sound ecological principles, its solutions were based on conventional suburban land use and planning concepts. The result was more auto-oriented sprawl that utilized natural infiltration, but failed to address the system of the single-use, car-dependent development form it was predicated upon.

Building on the groundwork laid by Low Impact Development, a new approach called Light Imprint has been developed. Light Imprint reduces the need for expensive stormwater infrastructure and provides more sustainable solutions than conventional engineering approaches. Techniques incorporate natural drainage, modern engineering infrastructure, and innovative infiltration practices, many of which are based on time-tested practice. This comprehensive collection of methodologies have been used for generations to deal with stormwater runoff, each with an appropriate application across a range of rural to urban contexts.



PERVIOUS COBBLE PAVERS, FREIBURG, GERMANY

Maintain Existing Hydrological Patterns

All sustainable stormwater solutions should begin with the least technologically complex actions. The simplest technique for the least expense is to preserve the existing hydrological patterns of drainage and percolation. This allows the land to handle the water naturally with minimal, if any, human intervention. Successful sustainable stormwater management is largely related to staying out of nature's way and avoiding the problems we struggle to remediate. By following natural hydrological patterns and using them as the framework, sustainable

stormwater practices can alleviate much of the need for expensive conventional engineering approaches and will inform the planning and design of communities by becoming a design element.

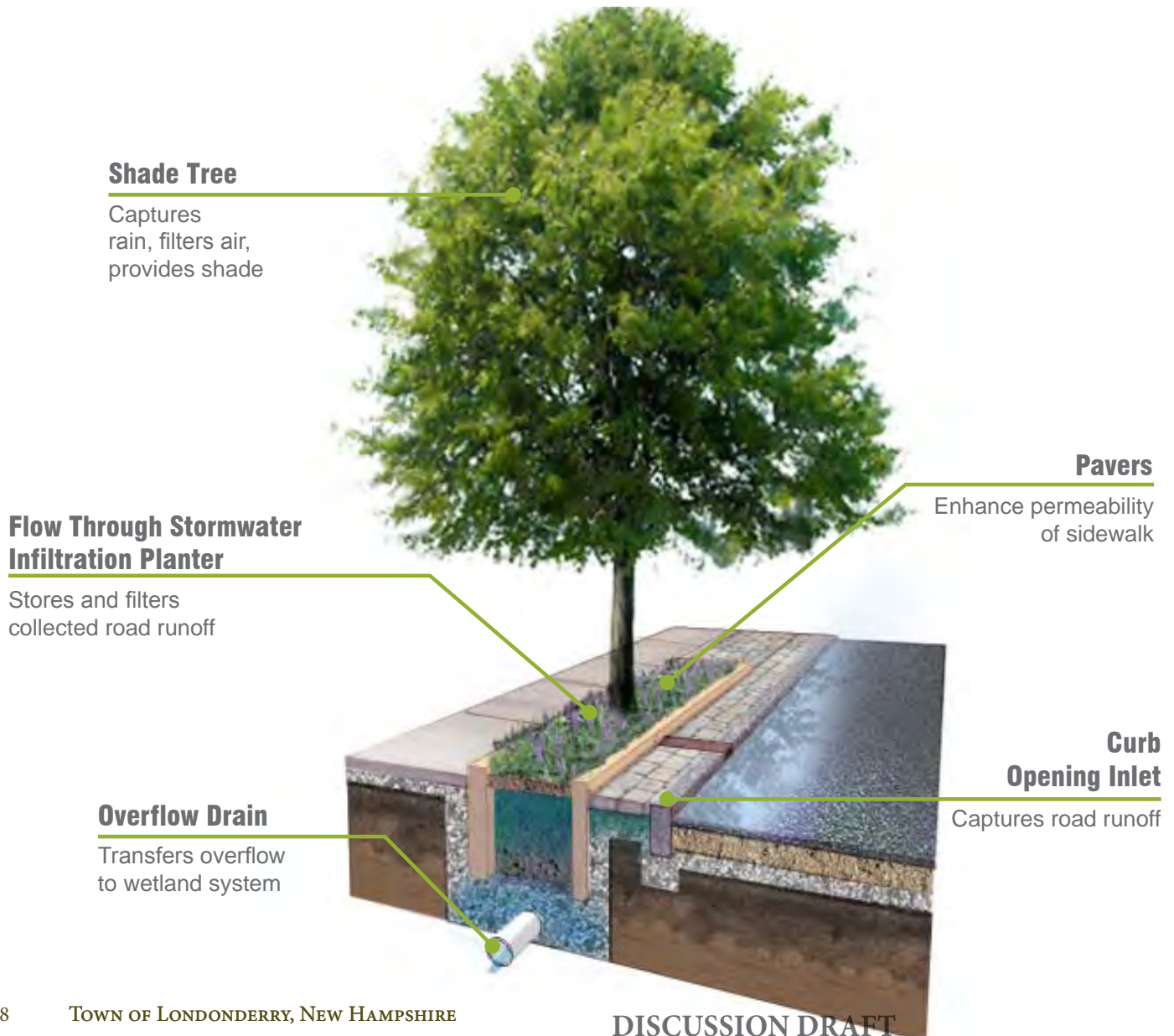
In Londonderry, some of the natural hydrological patterns in the landscape have been compromised by years of development. Opportunities exist to restore water systems and strengthen the interconnected network of greenways so they can begin to function as a system for natural infiltration and human enjoyment.



Green Streets

Green streets are thoroughfares that capture, temporarily store, and treat road runoff at its source by incorporating vegetated water catchment and filtration devices in the form of small rain gardens and bioretention systems. Components such as flow-through planters and other sustainable stormwater solutions allow stormwater from the street to enter planters through cuts in the curb where the plant material removes impurities and allows water to naturally infiltrate or be stored elsewhere. Water-loving plants and those that are

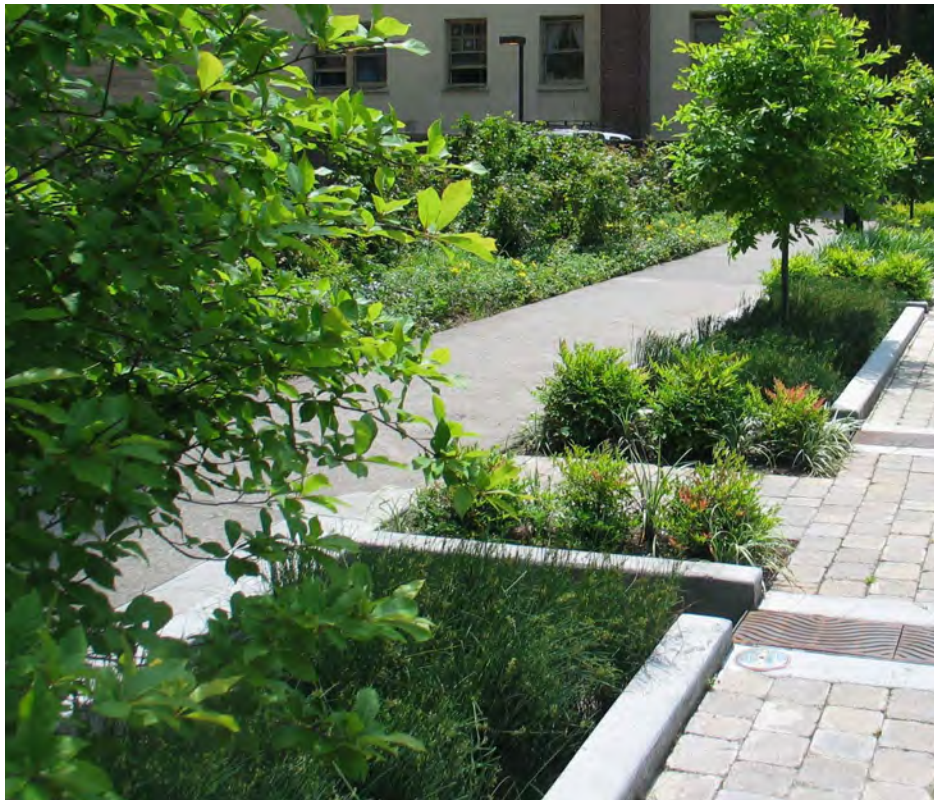
able to remove the impurities while thriving so close to traffic and in more urban environments are used in green street design, adding beauty and function. Additional infiltration can be achieved through the use of pervious paving materials for sidewalks and streets. It may be possible for Londonderry to retrofit existing neighborhood and thoroughfares around the town center to accommodate these kinds of bioretention systems, while also requiring these systems for new projects.



Bioswales

Bioswales are a utilitarian solution that utilizes the concept of short term storage and infiltration. Bioswales are linear depressions with gently sloping sides, planted with vegetation that treat stormwater runoff from rooftops, streets, and parking lots by slowing and filtering it as it passes through them and then channeling

any excess water to the storm sewer. The naturalistic aesthetic of the plantings make them an excellent solution for rural and suburban applications. Their use in urban settings must be carefully considered so as not to create an anomaly in the character of the area and make it difficult for pedestrians to use the street.



Rain Gardens

Rain Gardens are a natural infiltration solution that incorporates short term storage of stormwater in basins and swales. Also known as a vegetated infiltration basin, a rain garden is a man-made or naturally occurring low spot in the landscape in which stormwater is collected and stored temporarily until it infiltrates the ground. Rain gardens can be designed for recreation as well as serving their stormwater infiltration function. As

a recreational civic space, they work well because they store rainwater during a storm event and shortly thereafter when people are not usually playing in parks. After the water percolates they are available as a park again. With some adaptation, rain gardens can be located in all settings, from the most rural to the most urban locations.



Infiltration Parks

While rain water naturally percolates through the ground in a park, a few changes in design and construction can allow them to capture, store for a short time, and clean stormwater runoff. Thinking about the park as a part of the stormwater system is crucial. Surrounding areas can be graded so that the rain water flows towards the

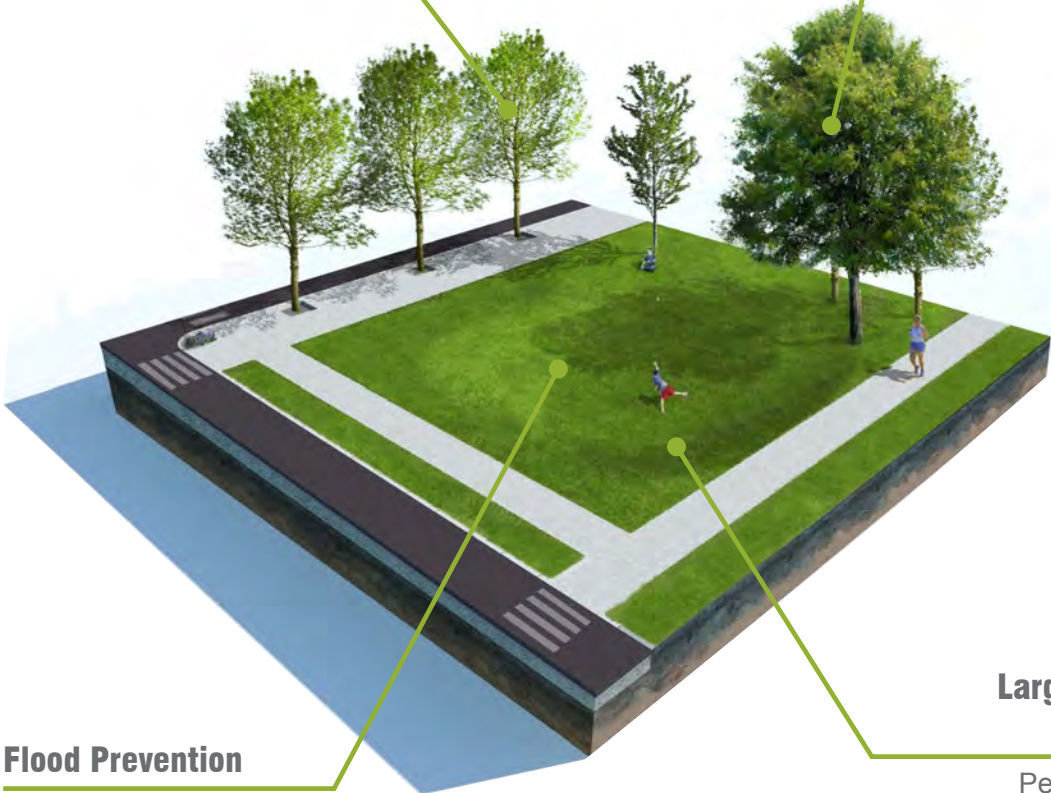
parks. Breaks in the curbing along the street allow the water to reach the grassy surface of the park. Creating a gradual and imperceptible depression allows water to collect in the park and stay there long enough to infiltrate. In the end it is important that the park does not appear as a stormwater facility.

Street Trees

Capture rain, filter air, provide shade

Woodland Buffer

Captures & filters rainfall, enhances plant and animal biodiversity



Flood Prevention

Topographic depressions retain excessive runoff and prevent flooding

Large Permeable Spaces

Permit infiltration, maintain groundwater levels and consistent base flow

Pervious Parking Lots

Conventional paved surfaces, including roads, sidewalks, and particularly parking lots, utilize asphalt, concrete, or tar surfaces that are entirely impervious. As a result of the paving material chosen and their lack of permeability, these surfaces tend to exacerbate stormwater runoff related issues. There have been many recent innovations in materials and pervious pavement systems that allow water to infiltrate large- and small-scale paved surfaces.

In New England, pervious surfaces face the challenge of frost and clogging from salt and sand. However,

different materials and applications continue to be tested successfully. The University of New Hampshire installed both asphalt and concrete pervious pavement, concluding that stormwater management systems using infiltration and filtration mechanisms, if properly designed, can work well in cold-weather environments.

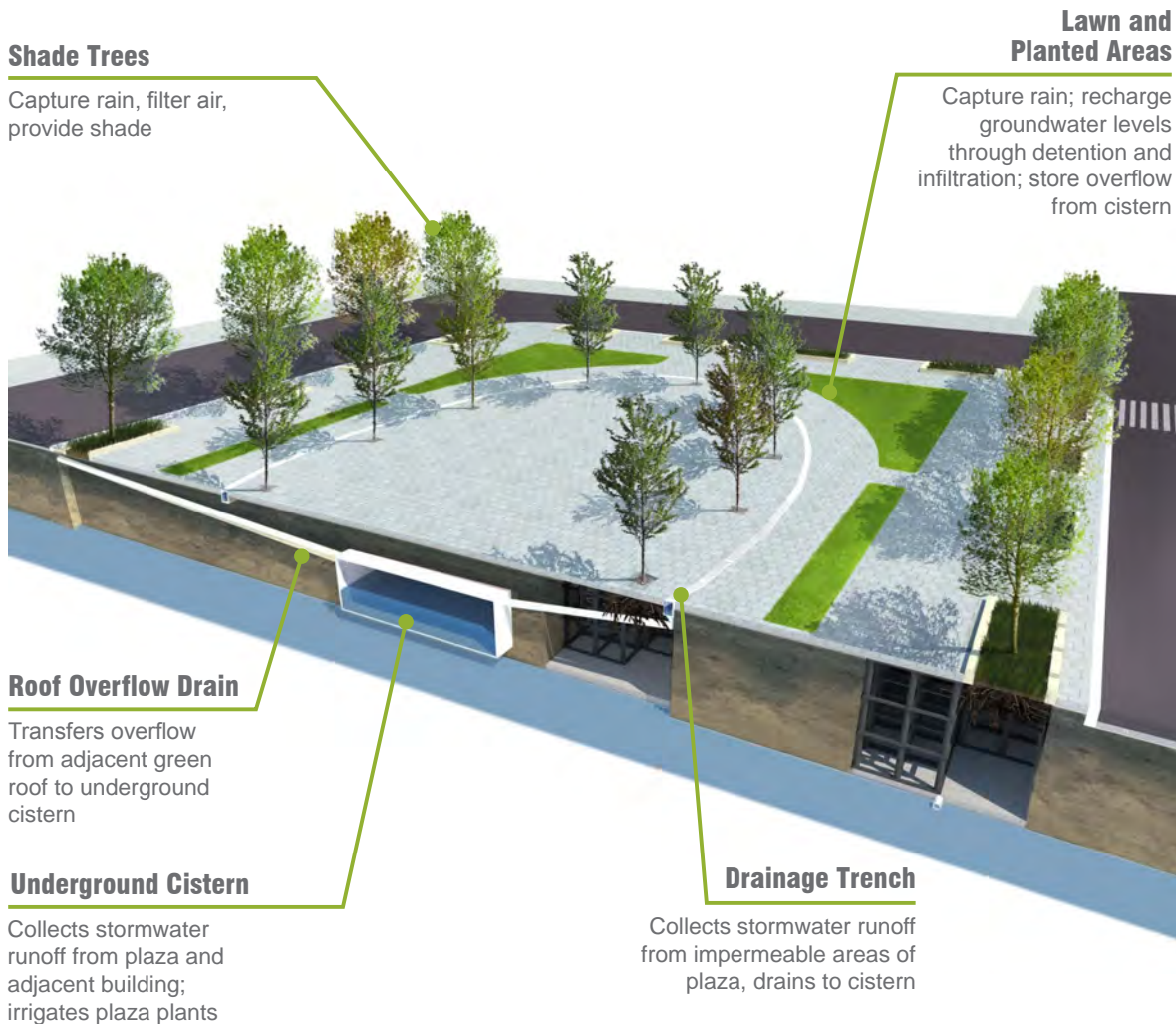
In addition to the pervious paving, infiltration planters with shade trees should be applied in parking fields to further enhance the area's ability to manage and treat stormwater.



Green Plaza

Plazas are not often thought about as opportunities for stormwater infiltration but when well planned and designed correctly they can provide an excellent solution in a more formal environment. The majority of the plaza is hardscaped with pervious pavers. Infiltration planters with shade trees and lawn areas are strate-

gically located for maximum pedestrian comfort and infiltration benefit. If necessary or desirable, a cistern can be located under the plaza and drainage channels can be integrated into the paving pattern to collect excess runoff and send it to the cistern for later use in irrigation.



Staircase Cascade

Incorporating stormwater treatment with beauty and delight, a staircase cascade can play a vital role in the conveyance of runoff in areas with substantial topographic changes. The stairs are gently sloped towards a series of parallel tiered infiltration planters. Because of the slope, the

high side of the staircase remains free for pedestrians to walk without much water underfoot. At the bottom of the staircase the knee wall of the stairs can extend further and be used to direct the continuance of the flow, if necessary.

Sloped Stairs

Directs runoff towards the planters with a gentle slope and slows the runoff as it traverses the staircase

Curb Opening Inlet

Captures road runoff and directs it into the infiltration planters

Stormwater Infiltration Planters

Stores and filters collected road runoff



Green Bike Path

Because bike paths are often adjacent to and link open spaces throughout a community, there are opportunities for them to become a contributing part of the overall sustainable stormwater system. A green bike path utilizes the linear form of the path to direct the stormwater runoff flows to the appropriate elements of the sustainable stormwater system. The

paving material, if any, could be pervious to allow some infiltration along its surface but an adjacent filter strip is also recommended to help process stormwater and filter it into the ground. In Londonderry, the design of the bike path could incorporate a variety of surface treatments and stormwater technologies as it moves from rural to more urban conditions.



Green Roofs and Walls

Green roofs are waterproof, vegetative roofing systems in which a root barrier, drainage system, light weight planting medium, and plants are layered on top of an impermeable membrane. They serve to insulate the building, reduce heating and cooling costs, absorb heat from sunlight, and limit solar heat reflection into the atmosphere, which contributes to the phenomenon known as the “heat is-

land effect”. Stormwater not used by the vegetation can enter and be stored in a collection system such as rain barrels or cisterns for later use. Green roofs are not only utilitarian, they can also be designed as an outdoor garden amenity. Finally green roofs can be used as part of an urban agriculture program to produce food for the building or others nearby.



Energy Efficient Design

Energy efficiency is one of the greatest interests of the “green” design movement. There are high-, low- and no-tech solutions related to sustainable design, although it seems that high-tech solutions receive the most attention and enthusiasm. It is important to remember, however, that low- and no-tech solutions should be deployed first. Only after they have been fully explored and utilized should high-tech solutions be considered. Most of high-tech systems have some additional up-front costs associated with them, although those costs may be recovered in the long term through savings in operating costs. Low- and no-tech solutions, however, can be put in place more quickly due to the reduced initial capital cost.

Some low-tech solutions require a change in mindset and educating consumers. This is especially applicable to the way in which we conceive of air conditioning systems, lighting and building materials. Air conditioning should be viewed as a backup for cooling only on extremely hot days, replaced in part by ceiling fans and natural ventilation. Similarly, electric lighting requirements can be reduced by taking advantage of natural sunlight. Finally, there are a number of building materials and products, such as windows, doors, water heaters, appliances, and advanced insulating materials that have been developed specifically with a view toward energy efficiency.



SOLAR COLLECTION SHADE STRUCTURE, DURANGO, CO

Shade Trees

The use of trees planted around houses is a simple and beautiful solution to reducing heating and cooling needs for buildings. When planted on the south and west sides of buildings, shade trees drop their leaves during the cooler fall season allowing warm-

ing sunlight to reach buildings. Additionally, they create a lush canopy in the warmer months providing shade to keep the building cool. This provides, a low tech, low cost solution to reduce energy needs.



SHADE TREES, BRUNSWICK, MAINE

Solar Orientation

Solar orientation is a no-cost energy efficiency solution. By taking solar orientation into consideration during the design process of not only buildings but entire neighborhoods, significant energy savings can be achieved. To ensure that passive solar heating, natural ventilation and daylighting can properly occur, window placement and size are critical as well as the inclusion of shading structures. In areas with smaller lots and buildings closer together, it is important to

make walls facing neighboring homes light in color to reflect light into the building next door. In considering solar orientation in the design of a neighborhood, it must not be allowed to supersede considerations of walkability. Neighborhoods designed for walking, biking, and riding transit rather than driving have greater energy saving potential than small scale measures to make individual buildings more energy efficient.



BARN HOUSE WITH SOLAR PANELS, STONY CREEK, CONNECTICUT

Natural Light

Buildings should have a sufficient number of windows and shallow enough floor plates to meet the majority of the daytime lighting needs with natural light. The energy efficiency of natural lighting must be balanced against the increased air conditioning and heating demand that may

be created by the use of additional glazing, though building orientation, deep eaves, and interior window treatments can be used to minimize the direct sun.



NATURAL LIGHTING IN THE BOURSE CO-WORKING SPACE, NEW HAVEN, CT

Ventilation & Air Conditioning

A no-tech energy saving solution that has been used for centuries is natural ventilation. Natural ventilation is achieved by providing vents or windows in the upper and lower levels of a building. Warm air, which naturally rises, is allowed to escape to the outdoors from the upper vents and/or windows while cooler air is drawn into the building through the lower openings. Cross ventilation occurs when openings such as doors and windows, located on the same level on opposite or adjacent walls, are opened to allow cooler exterior air into the building, which, in turn, forces warmer interior air out.

One method to improve the efficiency of natural ventilation is a solar chimney, often referred to as a thermal chimney, which uses the convection of air heated by passive solar energy. In some instances the air is further cooled by movement through underground ducts before it enters the building. Electric fans, such as ceiling fans, allow efficient cooling and consume much less electricity than traditional air conditioning systems. When used in conjunction with some of the no-tech methodologies listed above, traditional air conditioning use can be significantly reduced or eliminated with little effort or energy consumption.



WIND CHIMNEY, ALYS BEACH, FL

Greywater Recycling

Greywater is water that has been used for laundering, dish washing and in showers and sinks. Depending on the local climate and soil conditions, it is possible to recycle grey water for several uses such as landscape and food irrigation or constructed wetlands.

Recycling greywater reduces the amount of fresh water needed for each household and reduces the amount of wastewater entering the sewer system.



Rainwater Harvesting

Rainwater harvesting is the collection and storage of rainwater that otherwise would be lost during a storm event. For centuries, rainwater has been collected for drinking, irrigation and other uses; however, since the advent of indoor running water, this practice fell out of favor. More recently, as sustainable resource use has increased, this practice has gained popularity. Rainwater is now being captured and used for washing cars, showering, flushing toilets, washing clothes, and in some places, even for drinking by treating it with ultraviolet light.

Rainwater can be harvested by way of rooftop or ground catchment systems. Most systems consist of gutters and pipes attached to roofs channeling rainwater to a storage facility. The

form of storage varies, based on the scale of the system and whether it is located in a more rural or urban setting. The most rural storage option is the pond. Cisterns, which are large concrete, wood, or plastic storage chambers that often are installed underground, provide another storage alternative suitable for use both in rural and more urban areas.

A small storage alternative that works well for residential applications is the rain barrel. Rain barrels have become very popular in recent years and are sold even at national chain grocery and hardware stores. Because these systems, at their simplest, can be added to existing gutter systems with little cost, rainwater harvesting is an easy strategy that should be widely implemented at all scales.



Xeriscaping

Xeriscaping is a type of landscaping in which drought resistant plants that require small amounts of water and maintenance are used. While this practice can be utilized anywhere, it is particularly important in places where water shortages occur. Because non-native plant species and varieties often require more water and chemical treatment to ensure their survival, xeriscapes typically take advantage of

native plants accustomed to the climate of the region in which they are planted. Other xeriscape practices include conserving the moisture in soil by mulching planting beds, drip irrigation, and limited use of turf grasses.



Land Conservation

Numerous techniques are available to ensure the permanent conservation of land with scenic, recreational or habitat value. The development rights associated with a piece of property can be purchased which allow the land to be conserved in perpetuity. Additionally, the land may be purchased outright by a conservation organization or private citizens interested in protecting a piece of property

or protecting themselves from the impacts of the development of a piece of property adjacent to their property. Without tools like these in place, all private property is available for development.



Conservation Subdivisions

In contrast with conventional subdivisions, which divide up land into large lots leaving fragments of leftover open space, conservation subdivisions are a more sustainable development method that can help preserve larger areas of significance. With this development pattern, homes are built closer together on a development site, thus leaving more land untouched. Instead of having a large, under-utilized private lot, homeowners benefit from living near large areas of preserved open space that

can be improved with a trail system. Roads in the conservation subdivision are built to promote walkability and slow traffic movement, rather than to conventional standards that require oversized streets with an excess of stormwater infrastructure. In the illustrations below, the same number of homes are provided in the conservation subdivision as in the conventional approach.







piluwari
GEMISSE GEBEN SIE
gerne mit Charakter
mit Leidenschaft & Liebe

Waldeckhof
Raith

stangen-
bohnen

knoblauch
mit grünem
sauce

bundzwiebeln
frisch mit grün

mangold

knoblauch

Handwritten sign on a chalkboard



economy

Enhance the municipal advantage

Provide a healthy and sustainable business environment.

Build a community that is attractive to employers and their workers.

promote Londonderry and build a competitive advantage within Southern New Hampshire.

tools

- Place Based Tourism
- Ecotourism
- Agritourism
- Value Added Production
- Expanding the Londonderry Brand
- Eco-Industry
- Green Building Design

Place Based Tourism

Before the advent of niche tourism, such as ecotourism and agritourism, most tourism and travel was typically place-based. People traveled to historic cities, towns, or villages around the world to significant sites to experience different cultures.

Place based tourism is dependent on a high-quality built environment that is interesting, authentic, beautiful, and useful, with an overlay of history. In contrast, the suburban places in which most people live today would never be visited by place-based tourists because suburban environments are utilitarian and lack distinction.

It is possible to create the type of place that may have never existed in the community before or to build on the historic character of a place. Communities can create the type of places where people will want to visit by placing high priority on the quality of the built environment.

In a community like Londonderry, it is possible to emphasize and build on the strong sense of the past and the agricultural heritage to create enhanced centers of activity that will appeal to both locals and tourists alike.



Ecotourism

In the past two decades, a new type of tourism known as “Ecological Tourism” or more simply, “Ecotourism” has gained popularity around the world. Since 1990, The International Ecotourism Society (TIES) has defined ecotourism as “Responsible travel to natural areas that conserves the environment and improves the well-being of local people.” Due to the enthusiasm about sustainability and going “Green” that has swept across the world, many people are interested enough in places that have adopted and implemented these strategies to travel there to see the

practices in action. Because of this, a new subset of ecotourism has been created which extends the concept of ecotourism from being located only in natural environments into human habitats such as cities and towns. Ecotourism can include sightseeing and educational tours of sustainable communities, LEED-certified buildings or infrastructure such as wind farms, as well as many other areas of interest to green-minded tourists.



Agritourism

Many people are willing to pay to experience the rural character and authentic experiences associated with farming. As suburban life has spread, people have become more and more removed from their food sources and the ability to “put their hands in the soil”. Recently, the search for authenticity has expanded to include a desire for an increased understanding of food sources and production.

Agritourism, which is essentially another form of ecotourism, taps into the human desire for authenticity and a more direct relationship with food. People are seeking opportunities to spend time on a farm, staying in a farmhouse, helping with planting, tending to gardens and farm animals, and preparing and eating meals derived from their efforts. Although a working vacation, agritourists find it so rewarding that they pay for their experience, just as if they were relaxing in a resort.

Agritourism programs also can be provided as day programs for school groups and parents and children during the week.

With proper planning, an entire community or region can become an agritourism destination. This kind of transformation requires a rigorous marketing and branding strategy, as well as the infusion of agriculture into all aspects of the community.

Agritourism at a community level is an economic development program and should be treated as such. It needs to be provided a budget and manpower necessary to make it thrive. Community agricultural plots should be thought of much in the way a town thinks about creating new parks or creating an economic development program. Accessibility and visibility are critical to the success.

Agricultural form changes as you move from rural to more urban, with the commercial family farm on the periphery, to the neighborhood plot, to the urban rooftop garden and edible streetscape. Programming should include festivals celebrating seasonal harvests and coordination with local restaurants so they use products that are grown and produced locally.



Value Added Production

There is potential to build on Londonderry's established position as a center for orchards and pick-your-own farms by incentivizing value added propositions. This involves taking basic products and increasing the value of that product (and usually also the price) by adding extras in the manufacturing process. Value-added processing includes bakeries, canneries, breweries, distilleries, and butcher shops.

Londonderry could also try to market potential cooperative agricultural-related facilities to enable local small scale farmers to pool resources so they can generate a diversity of new value added products.

Expanding the types of agricultural offerings and identifying and filling niche market needs would add an important level of diversity to the local economy and position Londonderry for a greater level of economic resilience.



Expanding The Londonderry Brand

The Londonderry brand is already associated with value and quality, and many small entrepreneurs have been successful in using this to their advantage to expand locally, regionally, and even nationally. These businesses create local jobs and an expanding market for local agricultural prod-

ucts. Londonderry should continue to promote local companies and help them to grow, building a reputation as a community that values and partners with local business.



MACK'S APPLES, LONDONDERRY, NEW HAMPSHIRE

Eco-Industry

Often, companies that are in the business of producing goods and services related to sustainability and green building are not only concerned with profit, but also tend to take a more principle-based approach to doing business. They adopt a “triple bottom line” approach in which they factor in quality of life for people, the planet, and profit, aspiring to “do well by doing good”.

This socially, environmentally, and financially responsible model makes

it critical that these companies have a physical presence, identified by their stores and factories, that closely follows the principles of their corporate mission. As a result, “green” industries seek out Towns that embrace these same philosophies and actively encourage these companies to locate in their community. Becoming well known as a green town that is open for business to green and sustainable companies will go along way toward attracting these eco-industry operations.



CARBONDALE, CO

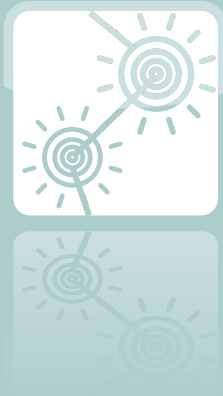


*The Old
Tavern*

PUB MENU
PHELPS BARN
TONIGHT

LIVE
MUSIC
TONIGHT





centers

Promote Unique Activity Centers

Promote a variety of walkable, mixed-use centers that respect the rural character of the community.

Provide new options people to live, work, shop, and participate in civic life.

Strengthen the town common as not only an emotional, but also physical center of the community.

↑ tools ↓

Neighborhood Structure

Character Zones

Form-Based Codes

Mixed Uses

Place-Based Business

Business Incubators

Boutique Craft Business

Artisan Industrial Space

Transitions (like facing like)

Neighborhood Structure

Neighborhoods should contain a discernible center and a clear edge. This is an organizational concept that provides an identity to the community. While it may be more difficult to have a well-defined edge surrounding a neighborhood, it is imperative that its center be well formed. The center of the neighborhood should include a civic open space such as a park, square, or plaza depending on its location within the range of contexts, from rural to urban. This center should have the most urban character in the community, with buildings pulled up close to the street and a gen-

erous sidewalk in front. If transit is available in the community, the transit stop would be found in the neighborhood center. In Londonderry, where there is a lack of clear neighborhood structure, there are opportunities to create small nodes of activity within walking distance of nearby residents, while also continuing to strengthen and improve linkages to the existing civic and commercial centers.



The Character Zones

Compact development is an effective method to preserve land having agricultural, habitat, or scenic value. While it may not be the preference of all citizens, the most sustainable way to develop is with higher densities. However, simply building more densely without taking into consideration the local market preferences of potential buyers will end in failure.

A sophisticated and nuanced approach is required, as is the recognition that there is no “one size fits all” solution. Utilizing the concept of the creating Character Zones, there will be a range of densities within community translating into a multitude of lifestyle choices for residents, from rural to town center and everything in between, or put differently, from more sparsely developed to more densely developed. The overall density of a neighborhood may be higher than a conventional development of the same size, but within the neighborhood, some areas may have lower density than the average lot in the conventional neighborhood.

All elements of design within each Character Zone should be arranged according to this conceptual framework, from untouched nature to man-made centers. The least intense rural environments are found in the C1 Natural Zone (C1), progressively getting more intense and culminating in the most intense urban environment, the Center Zone (C5). Elements such as density, plantings, setbacks, building heights, signage, lighting, thoroughfare design and other elements are variable but still holistically coordinated based on each Character Zone.



Form-Based Codes

Following the development of a clear vision, city's must modify their zoning ordinances in order to get the vision built. A form-based approach works to consolidate, simplify, and update zoning language to reflect the desires of the community. The form-based code is wrapped around this vision to make it legal.

A form-based code shifts the emphasis from use and instead looks to form and character as the primary organizing principles. In conventional zoning that is found across the country a community is divided into pods of use. Most of the uses, which fall into the broad categories of retail, residential, office, and civic uses, are compatible, and have traditionally co-existed happily in traditional communities for centuries.

Today, this approach is considered outdated and is commonly understood as the driver behind many of the traffic, social and environmental issues facing us today.

Form-Based Codes we conceived thirty years ago as an alternative operating system. Form-Based codes do the same job of setting the rules and expectations for development, but with a different focus on form, and also a greater appreciation for the complexity and nuance involved in protecting and making great places.

A form-based code tells you what to do, instead of telling you what NOT to do. This is a subtle but important difference, both psychologically and practically. If a developer knows what a community wants and is able to move forward with building the agreed upon vision, they are able to save time and money.

Form-Based Codes focus on the form of a place, including the space between buildings that make up the public realm, such as where the building sits on a lot, the frontage, sidewalk, planting area, drainage, and the street itself. Form-based codes

also consider the scale of blocks in order to create fine-grained and walkable places.

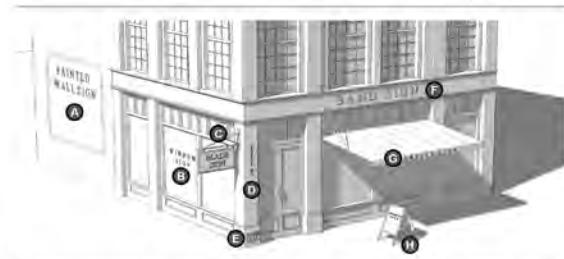
Instead of building setbacks, they talk about where the front of a building should be placed. Instead of Floor Area Ratio, they talk about appropriate scale and massing of buildings. All of this information is conveyed through the use of easy to understand diagrams of other graphic illustrations.

One of the many advantages of the form-based coding approach is the simplicity. The code language is written in plain English rather than in complicated legal speak and easy to understand diagrams are used to replace pages of text. The goal of a form-based code is to make it clear to the public and to land owners what is allowed.

Signage Introduction:

The signage in the City of Columbia will be following eight types: Painted Wall Signs, Window Signs, Blade Signs, Postal Numbers, Plaque Signs, Band Signs, Awning Signs or Sandwich Signs. Each of these sign types is appropriate depending on its location on the building and its location in the transect. Below is an illustration showing the location of each of the signage types and its typical scale and location on a business. It is not typical that each of these signage types will be used on a single business or facade. The permitted number and size of signage is found in the Signage Specific Standards on the following pages:

- A Painted Wall Sign:** Painted wall signs are large signage usually painted directly on a building wall.
- E Window Sign:** Window signs are painted and applied directly on the inside of a window.
- C Blade Sign:** Blade signs are small, two-sided, pedestrian-scale signs mounted with decorative metal brackets perpendicular to a building's facade.
- D Postal Numbers:** Postal numbers are small signs consisting only of the address of the building. These are located on or near the front door of the business.



- G Plaque Sign:** A plaque sign is a small metal or stone sign located in an inconspicuous location with the date of construction and/or the architect of the building.
- F Band Sign:** Band Signs are a horizontally oriented signage type applied directly to the facade of a building. They may be one unit applied or painted or a series of individual letters attached to the "expressions line" or entablature of the building.
- H Awning Sign:** Awnings signs are painted, screen printed, or applied in flat angled aluminum shade structures. They may be located on the drip edge and/or the main body of the awning.
- H Sandwich Sign:** Sidewalk signs are a secondary signage type used on prominent display and side, or give dimension to businesses without a sidewalk presence. These may have hand written elements.

Mixed Uses

Whenever possible, neighborhoods should include a mix of commercial (retail, restaurants, and offices), residential, recreational, and civic uses. This mix should be well-balanced, incorporating both vertical and horizontal mixed-use within the neighborhood, the block, and the building. An example of vertical mixed use is when a multiple story building contains commercial activity on the first floor and residential above. Horizontal mixed use occurs when buildings

with different uses are located next to each other. The image below contains both examples. An ideal mix would allow residents to meet all of their daily needs within a short walking distance. When this occurs, the number of automobile trips per household is substantially reduced. This mix of uses is optimized when commercial establishments have residential dwelling units above to help promote active streets.



MIXED-USE STREETScape

Place-Based Business

In today's idea-based economy, where creativity and innovation are often times valued more than experience and seniority, a new type of business environment has taken shape. The internet and other technologies have minimized old ways of doing business based on the physical office, time spent at your desk, and a long commute. The new resource is creative people and finding ways to attract them.

The office park of the 80's and 90's has been replaced with mixed-use corporate campuses and urban lofts and warehouses. Previously, municipalities competed to attract business with the tax breaks or Class A office space. Today many companies will only lo-

cate in a community that is walkable, mixed-use, and diverse. This is because the best employees will no longer settle for a suburban lifestyle and are seeking employment in vibrant communities with active street life and culture.

To take advantage of this shift in culture and mindset, Londonderry should incentivize the creation of high quality built environments and then rigorously tailor a marketing message to feature this aspect of the Town. Investments in place-making will pay off and should be considered an important economic development program in addition to a quality of life benefit for existing residents.



BALTIMORE, MD

Business Incubators

Local start-ups and new businesses form the foundation of a community in the sense that they generate both financial and social capital. Local businesses serve as a morale booster that help bolster the local economy and create the entrepreneurial spirit and buzz that attracts other creative types and an increase in tourism activity. The process of encouraging new business development can be spurred by the provision of incubator space.

Incubator space can be a light weight structure that is modular and moveable or it can be permanent. For an incubator space to be successful, it needs to be reasonably priced to

facilitate the start-up phase, with the understanding that the business will eventually move into a larger space once they are more established and their business begins to grow.

Often times, incubator space occurs within a transitional zone of a community, where there is an interest in promoting economic development and a greater sense of vitality. They can be placed in vacant lots, in or near parks, or along a sidewalk to buffer a surface parking lot. As the incubator location generates value, a temporary structure may eventually be replaced by more permanent buildings.



INCUBATOR RETAIL, BRUNSWICK, MAINE

Boutique Craft Business

There is a growing trend among the creative class to seek out local coffee roasters, brew pubs, artisanal cheese makers, and other businesses that offer high quality and locally produced products. Londonderry could seek out the kind of entrepreneurs looking for space in up-and-coming

urban places and provide them with incentives for setting up their home base in Londonderry. These kinds of businesses would provide locals with a more diverse set of opportunities to patronize and support local businesses.



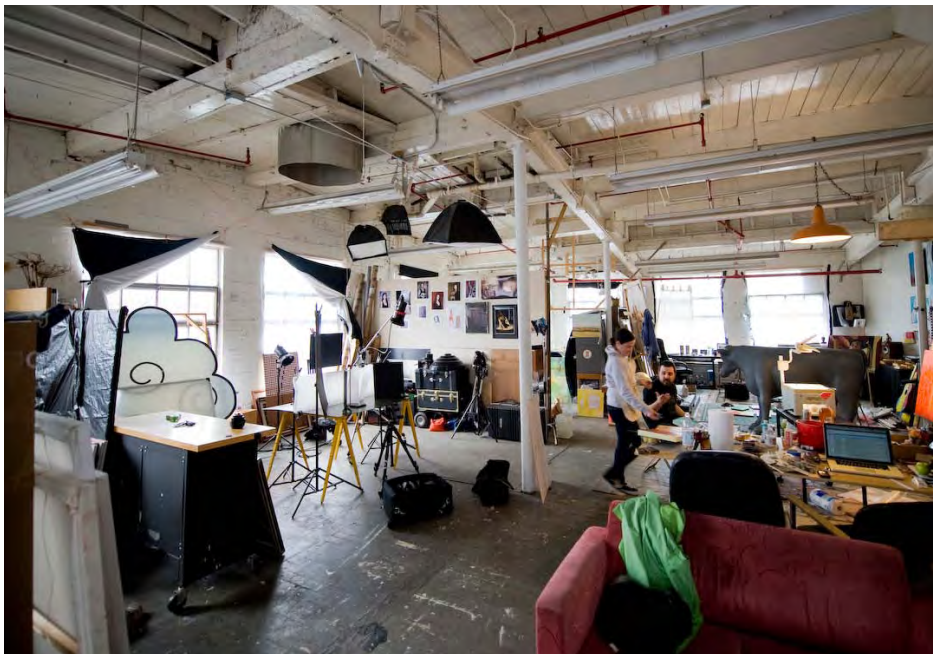
Artisan Industrial Space

Londonderry has an opportunity to integrate a variety of creative building types into its stock, increasing opportunities to attract different kinds of people to the Town. Artisan industrial space is designed to accommodate a workshop and living quarters within one building, similar to a live/work type, where one mortgage covers both uses. This allows creative entrepreneurs the means to affordably engage in small scale artistic and light industrial pursuits. These buildings can also be used for artist studios and creative knowledge workers. Artisan industrial space can be set up with ground floor workshops facing onto streets, with large doors that can ex-

pose the passerby to the work happening inside.

The process of encouraging new business development can be spurred by incentives for low cost incubator space as well as more permanent artisan industrial space, where land values are lower than those in the rest of Town.

Artisan industrial live/ works are single income properties that can have residential units upstairs and areas for light or artisan industrial activities on the ground floor, where work can be observed by people passing by.



Transitions (like facing like)

Like facing like refers to the way different building types are situated on a street. Ideally, the same building types should be across the street from each other. In many places with conventional planning regulations, blocks are built so that the same or similar building types are built along the same side of the street with different building types located across

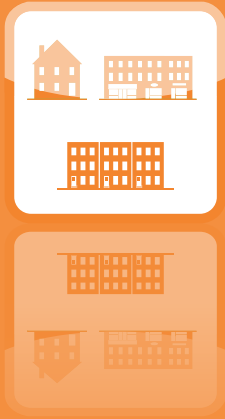
the street. This approach can be unpredictable and also result in lowered property values. Instead, similar building types should be facing each other because it protects the character of the streetscape by ensuring that buildings with similar densities are facing one another.



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and be creative]**





housing

Emphasize Housing Choice & Diversity

Provide work force housing to reduce commute times and impacts on road networks.

Create multigenerational communities and assisted housing for seniors so they can age in place.

Provide new graduate and starter homes.

↑ tools ↓

Mixed Housing & Diversity

Self-Sufficient Homestead

Farm Compound

Accessory Units

Neighborhood Parks

Mixed Housing & Diversity

Demographic diversity of people in age, income level, culture, and race provides a sense of interest and vitality within the most loved places in the world. In order to attract this type of diversity to a community, the physical form must be conducive to the varied lifestyles of these groups. A key component of creating an environment where diversity thrives is the provision of a mix of housing options. There should be many different types, sizes, and price points intermingled in close proximity, with a range of living experiences from rural to more dense, so that there is something for everyone.

The variety of dwelling types should include: different sizes of detached single family houses,

rowhouses, multifamily buildings, and live-work buildings. In addition, small ancillary buildings with a living space above the garage should be permitted within the rear yard of each principal building for extended family, tenants, or guests to stay or live. Residential units should be available either for leasing or for ownership. This allows young and old, singles and families, and residents having a range of income levels to find a dignified home that suits their preferences and lifestyles.

An additional benefit of this mix of housing types is that workers can live within walking distance of their jobs, rather than requiring that they commute to work, worsening traffic on local roads.



Self-Sufficient Homestead

Self-sufficient homesteading is a way for average homeowners to use their property to maintain a more self-sufficient lifestyle. , such as growing their own food, raising small animals, and even beekeeping. Homeowners do not need several acres of land to create a self-sufficient homestead. They can do these kinds of things on plots that are less than 1 acre. Most cities probably have regulations that would prevent homeowners from having these kinds of animals unless the property is in a rural zone. But self-sufficient homesteads should be encouraged by municipalities be-

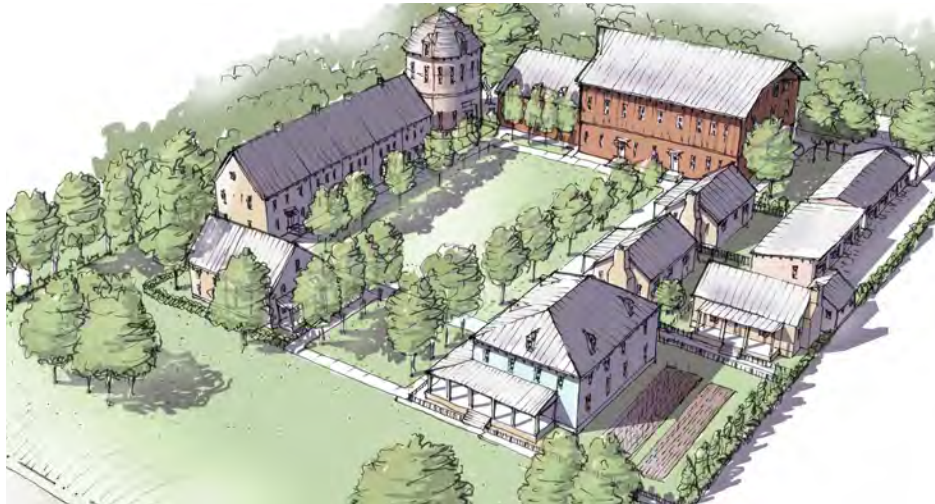
cause they help citizens live more sustainably. Land use regulations can be updated to allow property owners to pursue this kind of sustainability and self-sufficiency. Although there may be opposition to relaxing the regulations that prevent small farming and livestock in urban areas and residential subdivisions, certain cities may decide that it is important to promote values such as greener living and food connection.



Farm Compound

A farm compound is a multi-unit complex with a mix of types and sizes of residential units. This plan below accommodates 22 residential units and 22 parking spaces on 2.5 acres. The concept is designed to create an opportunity for density in a rural context without having a negative impact on the rural character. This is achieved by designing the site plan and architecture as if it were a historic farm that has been converted into a new use. For instance, the barn is divided into 10 loft units. Two

condo units have also been incorporated into the silo. The two-story outbuilding has been designed as four townhouses. The large farm house along the highway could either be a detached single family residence or corner store and the associated guest house is a duplex. Behind the farm house three caretakers cottages and sugar shacks will be available as single units. Parking is provided for all of the units in the rear corner in loafing sheds and stables.



Accessory Units

An accessory unit is a flexible space that shares ownership, site, and utility connections with the principal building on the lot, but has its own entrance. Usually situated over a garage toward the rear of the principle house, the outbuilding increases privacy and enclosure in the backyard by screening the yard from the house next door. Accessory units are significantly different from the “bonus rooms” that are found in conventional suburban subdivisions because they are not connected to the rest of the house. Instead it is much more private—making it well suited for use as a home office, guest room, or rent-

al property. If rented out, the additional “eyes on the street” help make the neighborhood a more safe and lively place. In addition to providing a potential source of income for the primary mortgage holders, accessory units also provide additional low cost housing options within the community. In Londonderry, permitting accessory units would be a sustainable and cost effective way for the municipality to encourage affordable housing that complements the character of the existing neighborhoods, by putting the control in the hands of the residents.



Neighborhood Parks

Londonderry is blessed with a number of larger recreation areas; however, there is a noticeable dearth of smaller neighborhood parks that can serve as gathering places. The Town should consider finding locations for

playgrounds within an easy walk of most homes to better serve the needs of local families and help attract new families to the Town.



Graduated Care Facility

A Graduated Care Facility provides a range of housing alternatives and varied levels of care for seniors. The complex is made up of detached single-family independent-living cottages and condos, assisted living, and related services. Each housing alternative has a different level of care: the cottages are for those who can live independently, while the condos are for those who need slightly more care, and the assisted living facility provides full time nursing and supervision. In addition, all the typical amenities that are found at an assisted living facility, such as the hairdresser and the eye doctor, are located on the ground floor in the form of storefronts facing onto the street and sidewalk. These amenities are open to the public, raising the quality of the services to meet the higher level of scrutiny given by paying customers who can choose to go elsewhere. On-street parking and a portico drop off area would be on the main streets, with a covered drop-off area and additional parking provided in the interior of the block.

The entire collection of cottages and the main building can be situated on one block within a walkable environment, located in a prominent position in the community and preferably next to a civic space. This location ensures that the elderly people are able to remain an integral part of the community even when they can no longer drive. In Londonderry's case, such a facility could be situated so it is contiguous to the ball fields. Here, residents can watch the activity from their porches or walk across the street and be an active spectator. There should also be small parks located internal to the facility, providing civic and social space for those residents who would rather not be in public. By having a variety of living conditions, services, and social opportunities all within one compact area, the elderly can be an independent and fully functioning member of society long into their senior years.







transportation

Balancing transportation choices in Londonderry

Provide a safe, reliable transportation system that balances all modes of transportation.

Prioritize complete streets that emphasize the quality and character of both the road and the private realm.

Promoting active living for all ages, with special attention given to the mobility of children and seniors.

T tools

- Walkability
- Connectivity
- Complete Streets
- Bikeways
- Cycle Track
- Bicycle Lane
- Sharrow
- Functional Bike Parking
- Secure Bike Storage
- End-of-Trip Facilities

Walkability

The term “walkability” has become a buzz word in recent years without much effort to provide definition. As a result, it is often misunderstood to mean a place that would be pedestrian-only or anti-automobile. In fact, the term describes an environment where there is balance between many modes of transportation. Most importantly, it describes an environment in which people feel comfortable walking. In Londonderry, where there is

a strong interest in promoting walking and biking, the following information will help clarify how to achieve the community’s goals.

The constituent elements of walkability are referred to as “The 3 D’s”: Distance, Destination, and Design. When each of these elements are addressed, people are more likely to walk.

Distance.

The average pedestrian is willing to walk up to one-quarter of a mile (1320 feet) or roughly five minutes to a destination. This ¼ mile walk from a neighborhood to a meaningful destination at the center is called a “pedestrian shed”. For most Americans, distances requiring more than a five minute walk will typically be made in a car rather than by walking. This walking versus driving threshold is locally calibrated.

Destination.

People will tend to walk more if they have somewhere meaningful to go. Meaningful destinations include civic spaces, schools, meeting halls, and commercial areas like neighborhood or town centers where daily or weekly shopping needs can be met. Often these destinations, when centrally located, become the “heart” of the community.

Design.

An interesting street and wide sidewalks are critical for a walkable environment. Pedestrian safety and comfort is also directly related to roadway width. Studies have demonstrated that traffic speeds increase in proportion to lane width, regardless of the posted speed limit. Narrow travel lanes, street trees, and on-street parking all act as effective psychological cues, helping to slow automobiles and, in turn, enhance pedestrian comfort.



Connectivity

Unless there are topographic or ecological constraints prohibiting it, every street should be connected to another street. By avoiding the construction of dead ends or cul-de-sacs, an interconnected network of thoroughfares can be achieved. The thoroughfare network provides a multitude of routing alternatives to and from all destinations in a neighborhood, dispersing traffic and limiting congestion. Having a thoroughfare network with a high degree of connectivity also enables individual streets to become more narrow, which slows traffic and increases vehicular and pedestrian safety. High connectivity also allows emergency service vehicles

many options to get to the site of an emergency call.

Connectivity standards in Londonderry should not be limited to automobiles. Encouraging a network of connected sidewalks, paths, and passages makes walking more convenient and enjoyable and increases pedestrian access throughout the community. Finally, by increasing the number of routes through the community, pedestrians are provided more interesting walking and jogging alternatives access to a variety of neighborhoods and destinations, and more opportunity for social interaction.



Complete Streets

It is imperative that choices be provided for alternatives to driving, such as bicycling, walking, hiking, and using public transit. While driving is not to be shunned, it should certainly not be the only option. Pedestrian-friendly neighborhood design is important to ensure a greater inclusion of alternative modes of transportation.

Complete streets are designed and operated to enable safe access for all users. Pedestrians, bicyclists, motorists, and transit riders of all ages and abilities must be able to safely move along and across a complete street. Complete streets make it easy

to cross the street, walk to shops, and bicycle to work. They allow buses to run on time and make it safe for children to walk to and from school.

Because complete streets contemplate the context through which the thoroughfare passes, all streets in Town should be complete streets, incorporating as many of the elements as possible or appropriate.

The following images show all of the elements of a complete street to consider when contemplating street design standards and future roadway improvement projects.





Bikeways

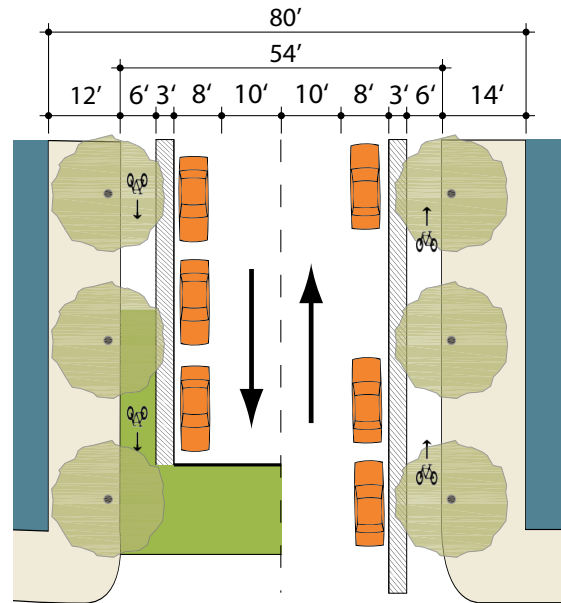
There are a variety of bikeway types that accommodate users with different experience levels, including trails, cycle tracks, bike lanes, sharrows, and riding with traffic. Communities should take a customized and nuanced approach to integrating bikeways, providing for a diversity types, including the cycle tracks, sharrows, and other locally-calibrated solutions. This will ensure that the appropriate treatment is used on each street

within the network, avoiding the one size fits all approach and enabling users of different abilities to enjoy a safe and direct route to their destinations. Making cycling as convenient, safe, and enjoyable as possible for the greatest number of people will position the Town to reduce reliance on the car and move toward a more sustainable biking future. See the following pages for more information on bikeway options.



Cycle Track

A cycle track is an exclusive bicycle facility that combines the user experience of a separated path with the on-street infrastructure of a conventional bike lane. Cycle tracks are separated from vehicle travel lanes, parking lanes and sidewalks with a physical barrier. A buffer strip can also be integrated to protect cyclists from car doors. Cycle tracks can be either one-way or two-way and be on one or both sides of a street. Unlike a more standard bike lane, this design physically protects cyclist from vehicular traffic, which has the benefit of greatly improving the rider comfort. Cycle tracks have been shown to decrease accident rates and increase the overall number of cyclists by over 15%, especially among older populations and families who would not normally use an urban bike lane. Because cyclists are not riding directly in view of drivers, intersections must be carefully designed to ensure safe mixing of cyclists in advance of vehicular turning movements.

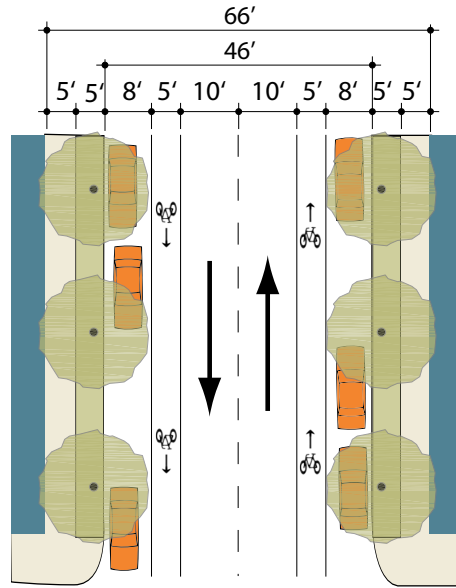


*for the
novice biker*



Bicycle Lane

A bicycle lane is portion of the roadway that has been dedicated for the exclusive use of bicycles. Bike lanes are typically located between the parking lane and the travel lane, moving in the same direction as vehicular traffic. They can be either one-way or two-way and be on one or both sides of a street. Studies have shown that a simple white line is effective in channelizing both motorists and bicyclists. Existing streets with more than 44 feet of pavement width can be re-striped to include bike lanes.

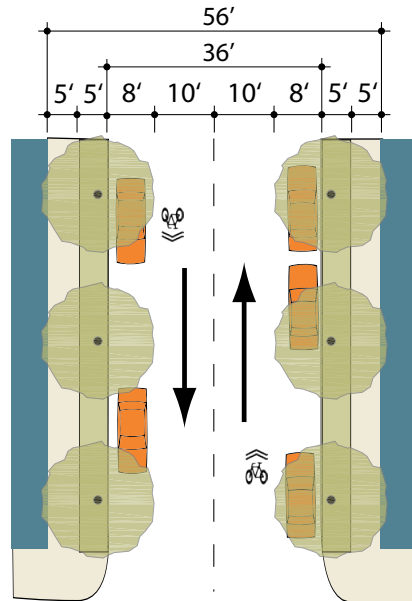


for the
confident biker



Sharrow

A sharrow refers to the condition where cars and cyclists share the travel lane. Sharrows are typically marked by a bicycle symbol with chevron, making it clear to drivers that the travel lanes is a shared space. Unlike a bike lane, a sharrow does not require additional lane width, which keeps vehicular speeds in check. Sharrows are a good solution for streets that are too narrow for conventional bike lanes or cycle tracks. They also have the benefit of being relatively inexpensive to install.



for the
experienced biker



Functional Bike Parking

Cyclists must have safe and convenient places to store their bicycles at a trip's end. One of the most user-friendly designs is the “u-shaped” bicycle rack, though locally-made options that maintain a high level of function should be encouraged.

Racks should be placed around Town at popular destinations, including schools, businesses, and civic buildings.



Secure Bike Storage

There is currently not enough permanent secure bike storage in Londonderry. A public / private partnership could be created between local non-profits and the City to fund and install secure, covered bike storage in proximity to the multi-modal center for commuters who come into downtown via transit. Permanent, secure bike storage should also be available

for those who access the City via bike trail and for use during events. Secure storage could be something as simple as a covered bike locker or a more elaborate bike station that includes a repair station, showers, lockers, changing rooms, rentals, and even cafe space.



End-of-Trip Facilities

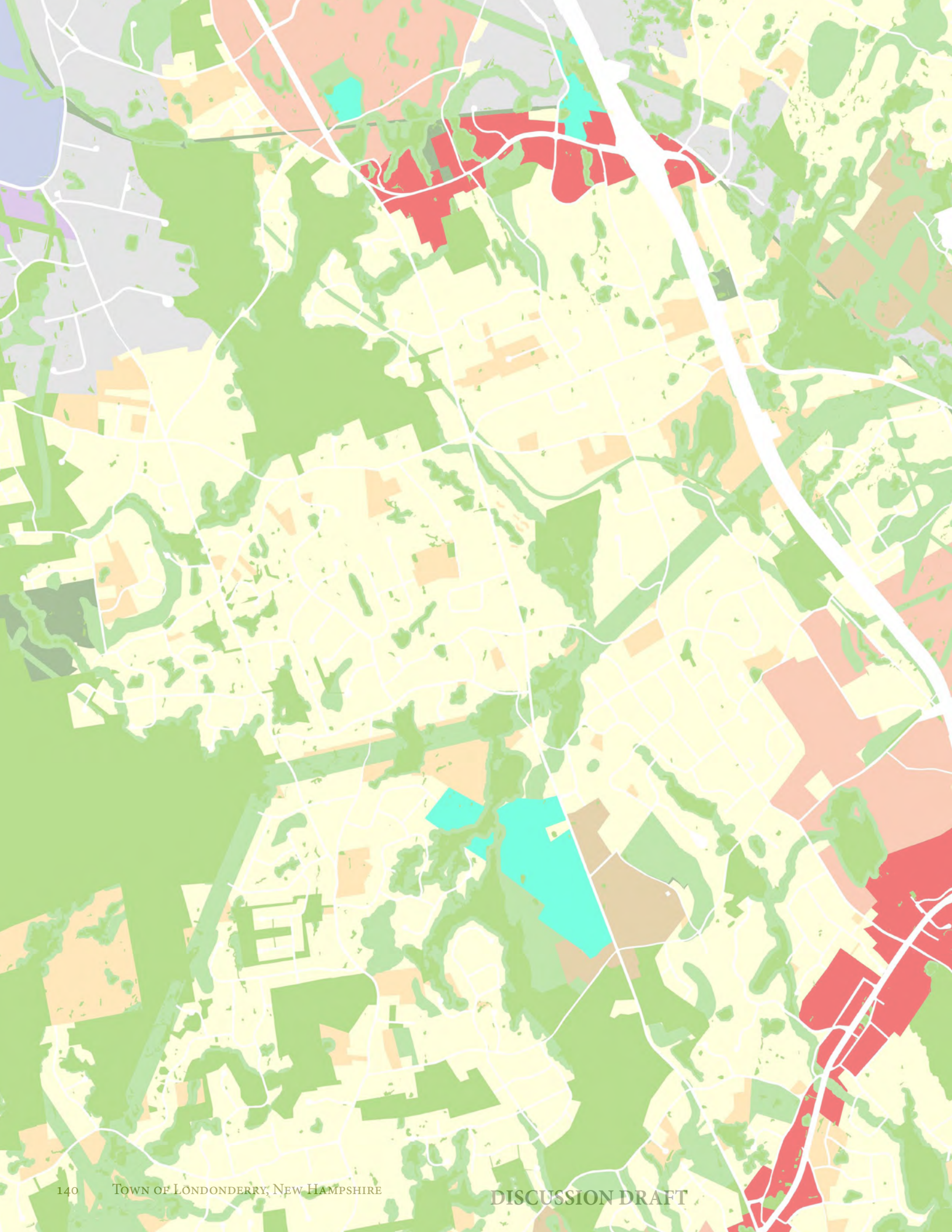
Easily identifiable bike shops, repair stations, cafes, and other businesses that cater to the needs of hungry and thirsty bikers will do much to build the Town's reputation as a bike-friendly destination. These kinds of highly functional end-of-trip fa-

cilities, combined with incentivized programs and other "soft" improvements, will continue to build on Londonderry's bikeability.



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and be creative]**



master plan

The master plan for Londonderry was imagined by the citizens. It is the guiding vision for the future and the physical manifestation of the tools generated through this process to address the Town's needs and strengthen the municipal advantage. The plan is a flexible framework and reflects one potential outcome for the future based on the project's timeless principles and community aspirations.

Conservation & Growth Map

Results from the technical analysis, combined with comments from participants at the Planapalooza event, supported the villages and corridors growth scenario for moving forward with the development of the comprehensive master plan. The growth scenario was the starting point for the development of the conservation & growth map, which is the organizing framework for the master plan and other system wide enhancements.

The conservation and growth map is organized by sectors. Sectors are used to guide where and to what extent open areas and growth area are to be encouraged and directed. There are 7 Sectors in Londonderry, O-1 Preserved Open Sector, O-2 Reserved Open Sector, G-1 Restricted Growth Sector, G-2 Controlled Growth Sector, G-3 Intended Growth Sector, G-4 Infill Growth Sector and G-5 Retrofit Growth Sector. See below for specific descriptions on the qualities of each sector. Sectors are assigned to different areas based on a number of factors, including preservation of valuable open space and availability of planned and existing infrastructure.

O-1 Preserved Open Sector is assigned to areas that are primarily open space and are permanently protected from growth by law, conservation easement, ownership by land trust or similar means.

O-2 Reserved Open Sector is used for primarily open areas that should be, but are not presently permanently protected from development. Such areas may include flood plain and special flood hazard areas, steep slopes, open space or corridors to be acquired and legacy woodlands, farmlands and viewsheds.

G-1 Restricted Growth Sector is assigned to areas that have value as open space but are subject to development, either because development rights have already been granted or because in the long term development rights should not be denied.

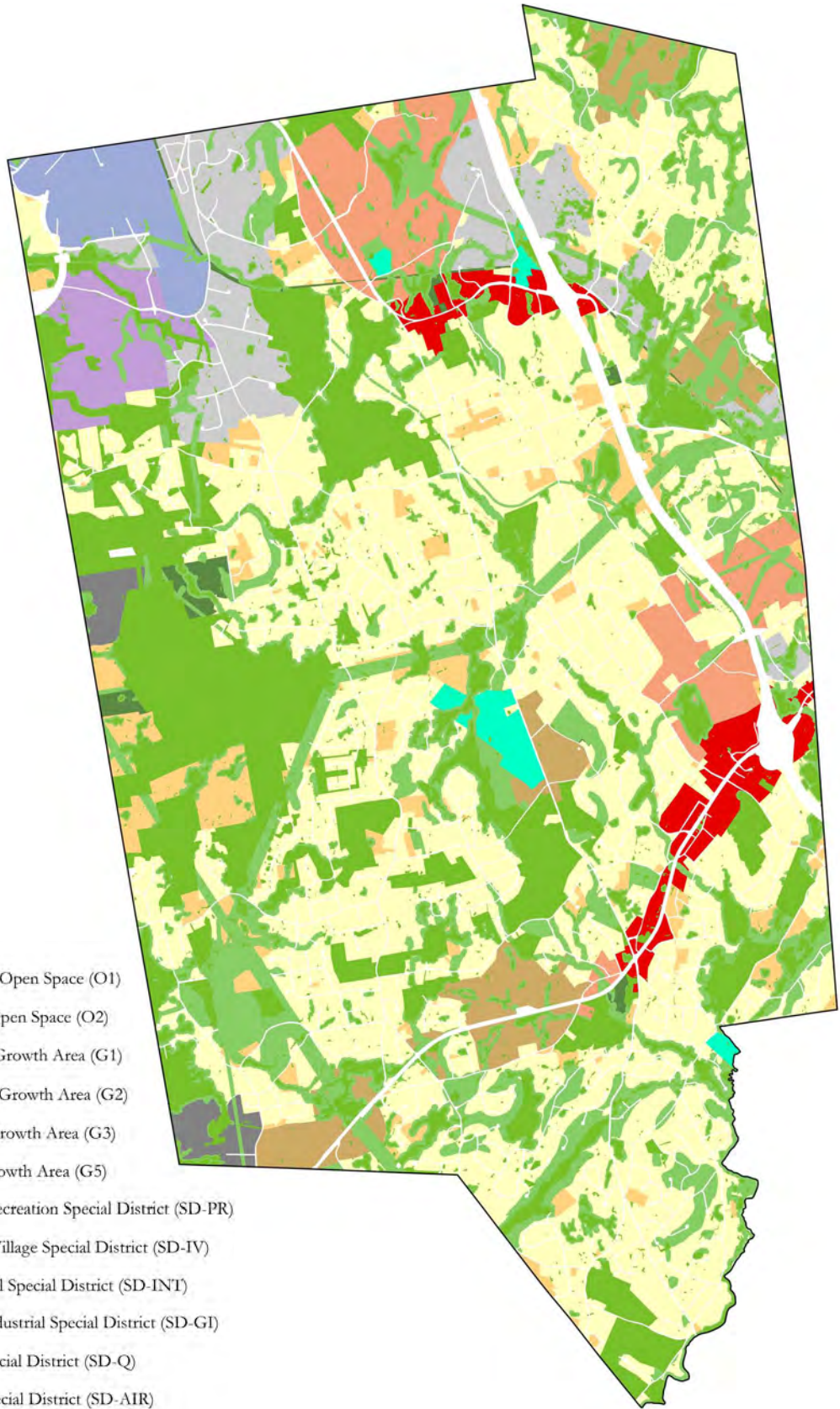
G-2 Controlled Growth Sector is used for areas that can support mixed use by virtue of proximity to an existing or planned Thoroughfare.

G-3 Intended Growth Sector is assigned to those locations that can support substantial mixed use by virtue of proximity to an existing or planned regional Thoroughfare and/or transit.

G-4 Infill Growth Sector is appropriate for areas that are already developed and have potential to be modified, confirmed or completed in the pattern of TNDs or RCDs.

G-5 Retrofit Growth Sector is for areas that have been developed in a conventional sprawl pattern but which have potential to be redeveloped in the pattern of a Community.

In addition to Sectors, Special Districts are used for areas that, by their intrinsic size, use, or configuration, cannot conform to the requirements of Community.



- Permanent Open Space (O1)
- Reserved Open Space (O2)
- Restricted Growth Area (G1)
- Controlled Growth Area (G2)
- Intended Growth Area (G3)
- Retrofit Growth Area (G5)
- Park and Recreation Special District (SD-PR)
- Industrial Village Special District (SD-IV)
- Institutional Special District (SD-INT)
- General Industrial Special District (SD-GI)
- Quarry Special District (SD-Q)
- Airport Special District (SD-AIR)

COMMUNITIES. Within each of the Growth Sectors, G-1, G-2, G-3, G-4 and G-5, Community types of differing intensities of development are prescribed. These Community types are Clustered Land Development (CLD), Traditional Neighborhood Development (TND) and Regional Center Development (RCD).

Clustered Land Development is a Community that is structured on the basis of a five minute walk oriented toward a common destination such as a general store, meeting hall, schoolhouse, or church. CLD takes the form of a small settlement standing free in the countryside. CLD is directed to the G-1 Restricted Growth Sector and the G-2 Controlled Growth Sector.

Traditional Neighborhood Development is Community structured on the basis of a five minute walk oriented toward a common destination, such as a mixed use center or corridor, meeting hall, or civic space, and in the form of a medium-sized settlement near a transportation route. TND is prescribed for the G-2 Controlled Growth Sector, the G-3 Intended Growth Sector, the G-4 Infill Growth Sector and the G-5 Retrofit Growth Sector.

Regional Center Development is a Community on the basis of 5-10 minute walk oriented to a common destination consisting of a high density mixed use center. RCD is prescribed for the G-3 Intended Growth Sector, the G-4 Infill Growth Sector and the G-5 Retrofit Growth Sector.

CHARACTER ZONES. Each Community is made up of various Character Zones, which are areas of differing character and development intensities. Within each Character Zone, land use, density, height, frontage and other elements of the intended built environment are integrated and define the human habitat.

The Character Zones identified for Londonderry are the CZ-1 Natural Character Zone, the CZ-2 Rural Character Zone, the CZ-3 Sub-urban Character Zone, the CZ-4 General Urban Character Zone and the CZ-5 Urban Center Character Zone.

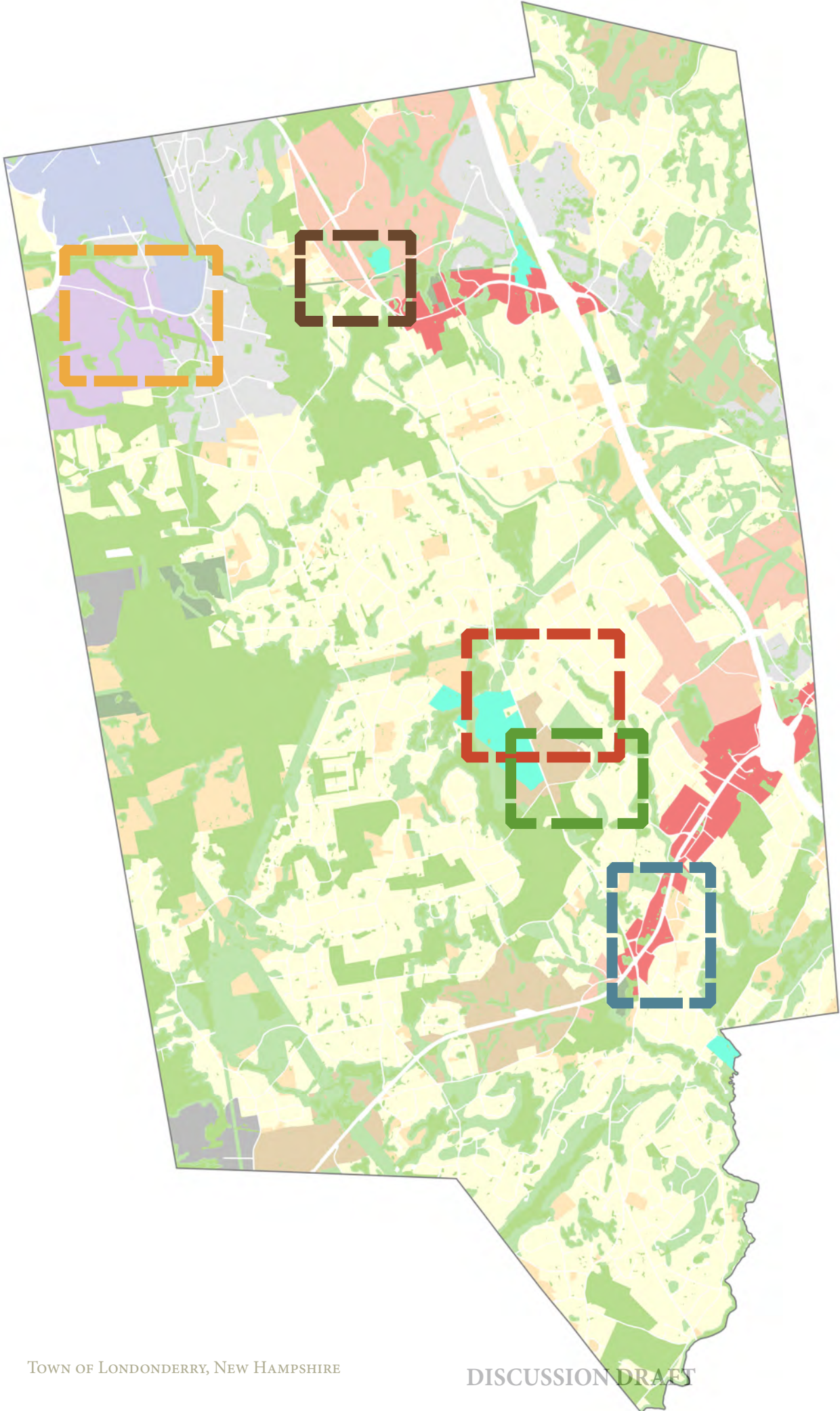
CZ-1 Natural Character Zone consists of lands approximating or reverting to a wilderness condition, including lands unsuitable for settlement due to topography, hydrology or vegetation.

CZ-2 Rural Character Zone consists of sparsely settled lands in open or cultivated states, including woodland, agricultural land, grassland, and irrigable desert. Typical buildings are farmhouses, agricultural, buildings, cabins and villas.

CZ-3 Sub-urban Character Zone consists of low density residential areas, adjacent to higher zones that have some mixed use. Planting is naturalistic and setbacks are relatively deep. Blocks may be large and roads irregular to accommodate natural conditions.

CZ-4 General Urban Character Zone consists of a mixed use, but primarily residential urban fabric. It may have a wide range of building types. Streets have curbs and sidewalks define medium-sized blocks.

CZ-5 Urban Center Character Zone consists of higher density mixed use buildings that accommodate retail, office, rowhouse and apartment buildings. It has a tight network of streets, wide sidewalks, steady street tree planting and buildings set close to the sidewalks.



While Londonderry has remained a vital and desirable place to live, the Town struggles to maintain long-time residents the tax base required to support municipal services and the world-class school system. For years the Town has experienced extreme population growth, without a clear plan in place that proactively deals with increasing development pressures. As a result, Londonderry has lost much of its rural land, while maintaining pockets of rural character and greenery along many of the roadways. While the town remains a desirable place to live, the community lacks choices and high quality affordable housing, making it difficult for singles, young professionals, and retirees to find a place to live. Traffic, a lack of walkable

destinations, and shortfalls in the quality of the public realm further deter potential residents and visitors. A complex and unpredictable regulatory framework also suppress the potential for investment by the private sector.

In order to respond to these issues, the master plan that follows addresses quality of life while also seeking to have a positive impact on the economy, business climate, tax base, and the sustainability of the Town long in to the future. This vision plan reflects the ideas and input of hundreds of citizens, stakeholders, and Town Departments, all of whom will play a critical role in turning this vision into a built reality.



PETTINGILL ROAD INDUSTRIAL VILLAGE



NORTH VILLAGE ARTISAN DISTRICT



TOWN CENTER RECREATIONAL VILLAGE



TOWN CENTER COMMON



SOUTH VILLAGE SUBURBAN RETROFIT

PETTINGILL ROAD INDUSTRIAL VILLAGE

The Pettingill Road area is largely accepted by the community as a desirable location for growth given its industrial zoning, proximity to the airport, and relative distance from residential neighborhoods.

This plan abandons the idea of the conventional industrial park and instead imagines Pettingill Road as a self-sustaining industrial village. Whereas people who currently work in this area must drive to meet all of their daily needs, the industrial village would accommodate a variety of manufacturing, office, and industrial uses, as well as the services and recreational opportunities needed to support workers, reducing the number of car trips on local roads. Because of the proximity to the airport and the zoning limitations, residential would be the only use not allowed within this area.

Taking it one step further, the village could be planned as a national model for a sustainable, closed-loop eco-village, where the businesses feed and service each other. Imagine one factory using the waste from another. And local restaurants serving food grown in the agricultural lands within the village.

Designed around a network of interconnected streets, the industrial village would not only provide a healthy and convenient place for workers and employees, but would also become a tourist destination.





PETTINGILL ROAD INDUSTRIAL VILLAGE

1 OFFICE USES

The plan accommodates for a large number of large format buildings that could be used for office space or light industrial uses. All four quadrants of the plan show a variety of building footprints to provide for the full range of office and industrial users.



Develop zoning regulations that emphasize building form. Consider adopting architectural standards to ensure a high quality pedestrian realm.



Community Development Department

2 FACTORY BUILDINGS

The plan includes locations for clusters of manufacturing and warehouse buildings, for both large-scale and medium-sized footprints. This arrangement allows for these industrial uses to be physically separated from office works and support retail, to accommodate for potential noise and fumes, while still close enough to be a reasonable walk to nearby support services. Like historic factories, the plan shows the buildings pulled to the street and located close to adjacent buildings to enable this area to remain convenient for walking.



Develop zoning regulations that emphasize building form. Consider adopting architectural standards to ensure a high quality pedestrian realm that is consistent with a strategy for recruiting target industries to the village.



Community Development Department
Economic Development Task Force

3 PEDESTRIAN-FRIENDLY ROAD NETWORK

The plan includes a primary road network geared toward pedestrians and cyclists, with continuous sidewalks, buildings pulled up to the street, high quality architecture, and slow speed traffic. A secondary road network to accommodate truck traffic is located to the rear with direct access off Pettingill Road and to the large rear parking lots.



Revise typical street section requirements in the Subdivision Ordinance to promote more walkable streets in the industrial village; emphasizing complete street design.



Community Development Department
Public Works Department

4 SUPPORT SERVICES

The Industrial Village is intended to function as a place where office and factory workers can meet their daily needs within a 5-minute walk. These services might include restaurants, dry cleaning, florists, and other services that are often times performed during lunch breaks or after work. It is likely that these service businesses would also attract the community at large because of the interesting activities taking place and the attention to the quality of the public realm. This area might also serve as a viable location for night life, with its significant separation from residential areas and ample parking made available when office workers leave at the end of the business day. Some of these smaller format buildings could also serve as business incubator space.



Amend zoning regulations to allow a wider mix of uses and the type of support services recommended for the industrial village.



Community Development Department

5 CIVIC & RECREATIONAL SPACES

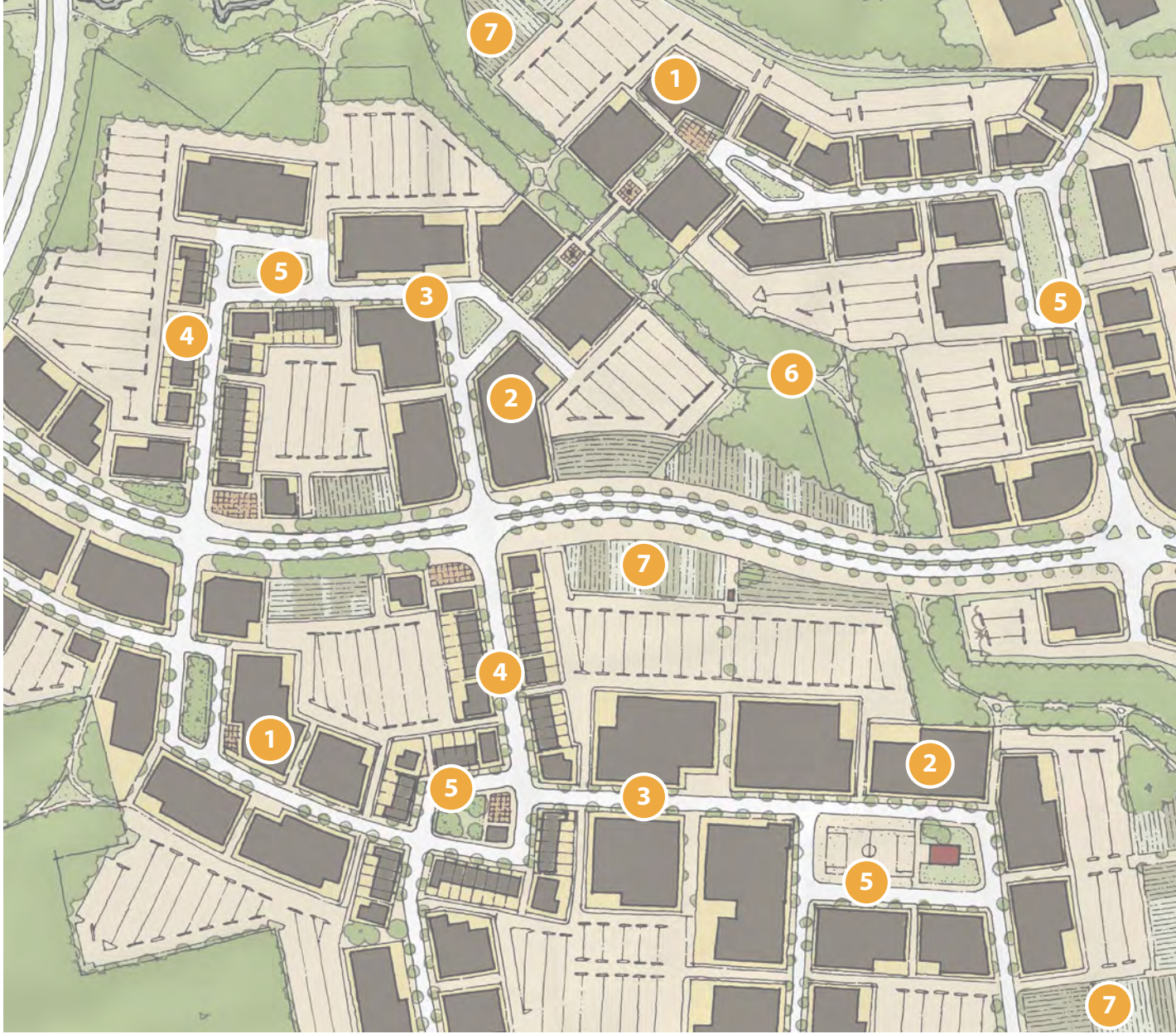
A park or plaza is located within a 5-minute walk of every building, with one outdoor civic space provided in each of the four quadrants of the plan. In the manufacturing and warehouse district, the plan accommodates for a soccer field and a fitness center (shown in red) to provide for active team recreation and convenient work out space.



Amend zoning regulations to allow a wider mix of uses.



Community Development Department
Conservation Commission
Open Space Task Force



6 RECREATIONAL TRAIL

The Industrial Village is knit together with a swath of green conservation land and the completed rail trail. This trail will provide a high quality open space for workers to run or walk and will allow the fitness enthusiast commute to work by bicycle.



Continue fundraising campaign to build the rail trail, beginning work soon on a preliminary engineering study. Explore opportunities to partner with the development community to expedite construction of the segment proposed through the industrial village.



Trailways Committee
Community Development Department

7 AGRICULTURAL LAND

Agricultural land is located along Pettingill road to provide a visual buffer from this high speed thoroughfare. Agricultural land also rings the village, providing significant tracks of land for agricultural production, as well as small plots for specialty crops.

This agricultural land plays an important role making the industrial village function as a self-sustaining, closed loop system. Food grown in this area can be used by nearby manufacturers or served in the local restaurants. Consider the possibility of locally grown barley used by a new local brewery to produce a craft beer that could then be served in a restaurant down the street.



Amend zoning regulations to emphasize building form and ensure that agriculture is allowed as a permitted use.



Community Development Department
Londonderry Conservation Commission
Open Space Task Force

This bird's eye view of the Industrial Village shows a world class center for manufacturing, industry, office, and support retail space, balanced with recreational activities, agriculture, and conservation land.

In the center of this view, you can see one of the service centers shown in the plan. A civic green is surrounded by small scale mixed-use buildings, with shops, restaurants, and artisan industrial spaces located on the ground floor, with office, and other uses located above.

On the far side of the green is a hotel to service airport travelers, tourist, and business executives.

In the distance you can see an area of large manufacturing and warehouse buildings oriented around a soccer field. A fitness center is facing onto the field, providing an opportunity for workers to fit in a workout without having to take an extra car trip.

The village is surrounded with agricultural and conservation land. Green roofs are shown on large buildings to minimize the heat island effect and provide additional space for growing food.





TOWN CENTER: RECREATIONAL VILLAGE

During the public engagement process, participants were repeatedly asked what area they consider to be the center of Londonderry. Overwhelmingly, people agreed that the cluster of activity around Town Hall, the schools, and the common represents the center of town.

Despite this consensus, the center of Londonderry lacks clear definition and, for anyone visiting town, there is no clear indication of where this center begins and ends. Buildings are pulled back from the street and lack a clear relationship to each other, there are limited destinations to encourage walking and biking, and the roadway is designed to promote high speed traffic.

This plan re-imagines this area as a center for civic activity, tying together the fields, schools, and municipal buildings into a complete village, with a focus on recreation.

The plan responds to local interest in having additional recreational facilities, which could be built over time and as funding becomes available. Reorganized ball fields provide an opportunity to use the space more efficiently and provide civic spaces for people to gather.

Small lot homes for young families enable more kids to walk to school, while senior housing provides an opportunity for people to stay engaged in the life of the community while aging in place.





TOWN CENTER: RECREATIONAL VILLAGE

1 FIELDHOUSE & COMMUNITY POOL

We heard during Planapalooza that there is a need for more indoor recreation space. The plan accommodates for a fieldhouse sized for ice hockey and indoor soccer. An outdoor community pool is located next to the field house, convenient to local schools.



Evaluate the feasibility of building a fieldhouse and community pool at this location; start the process to secure funding for these improvements.



Recreation Department
Londonderry Recreation Committee

3 COMPLETE NEIGHBORHOOD

The plan integrates a range of starter homes on small and medium sized lots to accommodate for young families, retirees and others who want to live within walking distance of the schools and fields. These new neighborhood streets will provide continuous energy and a sense that something is always happening, with residents functioning as guardians of the civic space. A new central green anchors the neighborhood, providing a focal point for civic life. Concessions, cottages, and the graduated care facility open onto the space, in addition to second story residential units.



Develop zoning regulations that emphasize building form and community character in order to support the local vision.



Community Development Department

2 REORGANIZED BALL FIELDS

The plan for this area anticipates reorganizing existing ballfields to make better use of the space. A championship field, with a grand entrance, press boxes, stadium seating, and possibly lighting for night games, opens up onto a central civic space with a central green. All of the fields are organized around civic plaza that provide places for people to gather.



Evaluate the feasibility for reorganizing the ball fields in this location and start the process to secure funding for these improvements.



Recreation Department
Londonderry Recreation

4 SENIOR HOUSING

Knowing there is a strong interest among local residents to age in place, the plan includes a graduated care facility in this central location within the community so that retirees can remain involved in civic life. The facility includes independent living cottages for able-bodied people looking to downsize, clustered together, where residents can sit on their porches and watch the ballgame and say hi to kids as they walk by. The main facility accommodates the different levels of care, with ground floor retail that serves residents in the form of storefronts, so that these amenities would also be open to the public, such as a cafeteria, optometrist, dry cleaners, hair dresses, cafe, and pharmacy.



Develop zoning regulations that emphasize building form and allow for a wider mix of uses and building types.



Community Development Department

5 DOG PARK

During Planapalooza people expressed an interest in a dog park, something that Londonderry currently lacks. The plans accommodate for our four-legged friends at the edge of the new neighborhood adjacent to the ballfields. The plan shows two separate fenced areas to allow for the standard rotation, where one area is actively used while the other recovers.



Evaluate the feasibility of a dog park at the proposed location in the recreational village and secure funding for these improvements.



Town Manager
Community Development Department



6 COMMUNITY GARDENS

The vision attempts to integrate small scale agriculture into the village to provide more opportunities for people to grow their own food. A small community garden is also shown in the mid-block of the residential neighborhood, providing a place for residents to grow a small supply of fresh fruits and vegetables. A larger community garden is located on the land that surrounds the FAA beacon, a low impact use that will transform this grassy knoll into a shared agricultural space.



Sponsor and administer a community garden program for town residents, with fee-simple purchase or lease agreements for agriculture uses.



Town Manager
Community
Development
Department

7 THE AUDITORIUM

During Planapalooza, residents indicated the need for a number of public facilities, but nothing received more attention and debate than the auditorium. The community is largely split, with people both supporting and opposing the need for this facility. The debate comes down to money and the tax burden from the capital expense and subsequent operational cost. The good news is that no one who was verbally polled is opposed to a free auditorium. Understanding that this is a controversial topic, the plan accommodates for a public auditorium, not managed by the school but located adjacent to it. A new civic space is framed by the auditorium and an additional new building that could provide space for future school expansion. This space would both serve as an academic quad for recreation as well as a gathering space before and after events and performances.



Update the Auditorium Study Committee report completed in 2006 to reaffirm if the conclusions and recommendations are still valid for 2012.



Town Manager
Auditorium Study
Committee
(Reconvened)





This birds eye view of the new recreation village shows reorganized ball fields in the foreground, with plazas and concession stands, public rest rooms, and other service buildings located in close proximity. A championship soccer stadium with bleachers is provided, with additional fields located to the north. A championship baseball field and tennis courts are also provided, with grand entrances to emphasize their importance. A new field house for indoor soccer and ice hockey is located adjacent to the new outdoor community swimming pools. The field house fronts onto a central green, that is also surrounded by small shops that might provide concessions, as well as the graduated senior housing facility.

In the distance, across Mammoth Road is the high school, with two new additions added onto the front, including a community auditorium and expansion space for the school. These buildings frame a new civic space that can be used by students and people attending shows and performances in the auditorium.







This rendering illustrates the new civic green in the center of the recreation village. The park is framed by a new grand entry into a championship baseball stadium as well as the senior housing facility, which has ground floor retail uses that serve the residents and are also open to the public. In the foreground, independent living cottages with front porches provide an intermediary step for able-bodied people before moving into the graduated care facility. Shade trees are provided throughout the village, with complete streets that provide sidewalks, street trees, on-street parking, and slow moving traffic so that kids on bikes will feel comfortable and encouraged to ride in the street.

TOWN CENTER: THE COMMON

In the spirit of creating a true center for Londonderry, the plan for the Town Common imagines a more intentional gathering place for the community. The vision anticipates that any change to this important civic space would occur incrementally over time and result in the kind of changes that generate greater use of this important resource.

Surveys taken prior to Planapalooza indicated that a majority of people want to see some kind of building around common. People generally agree that there is not enough going on at the Town Common, that it is underutilized, and difficult to access. If it weren't for two churches and the statue, you would never know the space was a civic common rather than left over land on the corner.

Responding to the interest in activating this space while maintaining the rural character of the common, the vision tries to gauge what is palatable to most people, while balancing that against the interest of those who don't want any change at all.

The result is a plan that might have evolved naturally at an agricultural crossroads, where the park is framed by detached buildings that look residential in character, but might provide amenities that appeal to the student population.







TOWN CENTER: THE COMMON

1 CHURCH INFILL

A church has expressed an interest in building in this location. The plan emphasizes the importance of the church by locating it on a green formal. A parish house and/or single family homes line the street and conceal the parking lot. Orchards at the rear of the site are preserved, providing an ideal setting for weddings and community events. If designed with quality and attention to detail, this new church could contribute to the civic life and beauty of the Town Center.



Create zoning regulations that emphasize form to allow the design proposed for the church site.



Community Development Department

3 SKATING POND & TRAIL NETWORK

During Planapalooza we heard that the town forest is underutilized and functions poorly as habitat. We also heard that there is a strong interest in having a skating pond to provide an additional activity for kids. The vision suggests celebrating this community asset by making the town forest an extension of the civic center. Nature trails are pulled into the woods and a skating pond provides a focal point and a special place for people to gather in the forest, capitalizing on the views across the countryside.



Evaluate the feasibility of a skating pond in the town forest and start pre-planning for extension of trails leading to the pond.



Recreation Department
Londonderry Recreation Committee
Londonderry Trailways Committee

2 FRAMING THE COMMON

The town common is the emotional heart of Londonderry, although the space is rarely used outside of scheduled events such as Old Home Day. For those not from Londonderry, there is nothing to indicate that this is the center of Town, and it is easy to miss the common altogether as you drive by. In response to community interest, the vision transforms the common into a destination and place for daily civic life, while carefully maintaining the rural character of this important corner. This careful redesign involves some complex land negotiations and is anticipated to take place incrementally over time.

The plan shows a narrow two lane road added along the back edge of the common, fronted by detached buildings that look like houses but could be commercial in nature. Imagine a coffee shop, ice cream parlor, or bookstore, and maybe a small cafe, the kind of shops that would appeal to teens as well as adults. To enable this kind of change, a sliver of land from the underutilized town forest would need to be taken, a tradeoff that most people seem comfortable with if the replacement is low scale in nature.

To further define the edge of the common, homes, which could also be converted into retail or offices, line Pillsbury Road. New civic buildings are shown next to the Lion's Club to frame the common along Mammoth Road. Parking, as always, is located in the rear so it is not visible from the street, with parallel parking recommended along the roads that front the common and extending up to the schools to help slow traffic.



Complete a formal study of the town commons area to refine recommendations and develop zoning regulations that will ensure the proper execution of the vision.



Town Council
Community Development Department

4 FORMALIZE THE GREEN SPACE

The common currently lacks a functional layout reminiscent of a traditional town common. There are no paths that invite you in, few places to sit, and nothing that defines the space. The common is rarely used and if it weren't for the churches and statue, there is no indication that this is an important civic space. There is general agreement that the common should be improved to make it a place that people want to use, even when nothing is programmed.

The plan shows a central path that leads from the corner of Mammoth and Pillsbury Roads, terminating at a new, larger bandstand, with secondary paths leading in from the side. A low stone wall runs along the edge of the common, helping to indicate to those passing by that this place is intentional and important.



Move forward with funding and building the new town commons green space proposed in the comprehensive master plan.



Town Council
Community Development Department

DISCUSSION DRAFT



5 SAFE STREETS

To help people understand that they are entering the town center, Mammoth Road should be redesigned to slow traffic and give priority to pedestrians and cyclists. A complete street retrofit should be considered, with smaller curb radii or bulb-outs to shorten pedestrian crossing distances at intersections. Wide sidewalks, a planting strip with street trees, on-street parking, and narrowed vehicular travel lanes are recommended from the southern end of the common to the high school.



Work with the New Hampshire Department of Transportation to implement improvements for Mammoth Road that emphasize complete street design; program funding for these improvements as a catalyst for redevelopment in the town common area.



Town Council
Public Works Department

6 NEIGHBORHOOD CREATION

There have been ideas discussed for what could happen on this parcel in the future. It is currently listed on the green map, but if permanent protection does not occur, the parcel may be considered for development. Understanding this possible outcome, the vision shows the kind of tradeoff that should be expected when open space doesn't receive permanent protection. Here, a complete neighborhood is created, with an interconnected system of narrow streets, with sidewalks, street trees, parallel parking, and slow traffic speeds. This kind of block structure is flexible and can accommodate a variety of potential development scenarios, but in all cases the result should be a real place, that is walkable, safe, and interesting.



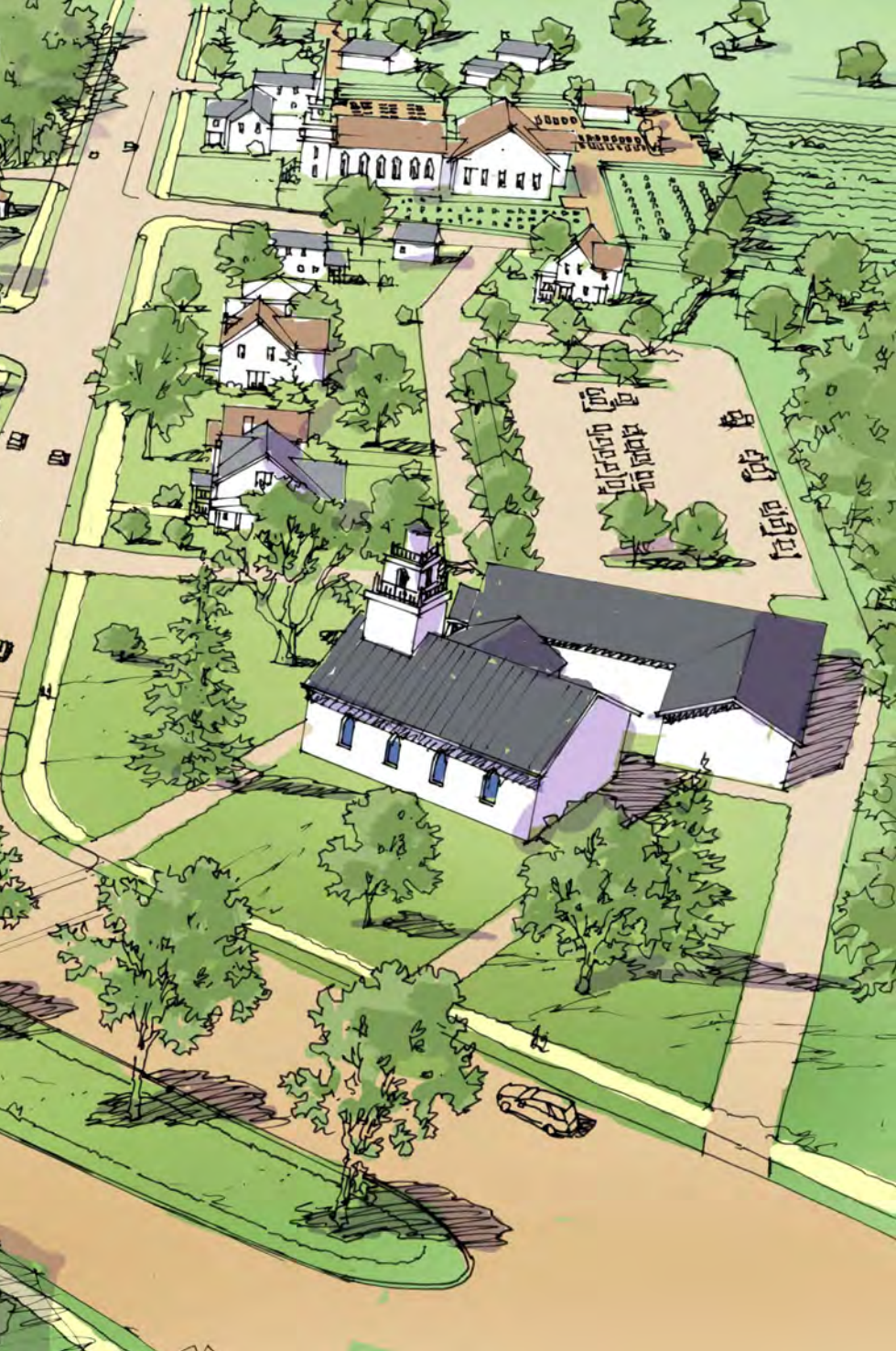
Determine whether this area should become permanent open space, and secure funding for its purchase. Alternatively create zoning regulations that emphasize form and community character.



Londonderry Conservation Commission
Community Development Department



DISCUSSION DRAFT



This bird's eye view shows the proposed plan for the town common, which would occur incrementally over time. On the right side of the plan, you can see the Presbyterian parking lot has been relocated to the rear of the lot, and replaced by a proper church green that visually extends the common across Pillsbury Street. New homes fill in the gaps along this street, helping to provide the common with a sense of enclosure. Further up the street, a new church has been built, with a parish house that conceals the parking located in the rear.

In the foreground, a new slip lane has been added that extends from the Grange to the Lions Club, transforming an expanse of asphalt along the street into a shared street with a sidewalk, parallel parking, and slow moving traffic. Off-street parking is relocated to the rear of the buildings.

The centerpiece of this plan involves creating a backdrop for the common and a means for activating the space. Currently, the common disappears into the shadows of the town forest. The vision shows the addition of a narrow two-lane road lined with a row of detached buildings that are residential in appearance. These buildings can be mixed use, with shops on the ground floor that help generate foot traffic. Trails lead from the common into the town forest to the new skating pond that overlooks the countryside.





This view of the common helps to illustrate the low impact the proposed vision has on the rural nature of this important crossroads. In the distance you can see how the additional buildings provide a sense of scale and enclosure to the common and generate a level of activity that draws in the pedestrian.

You can also just make out the skating pond through the woods.

NORTH VILLAGE ARTISAN DISTRICT

At the turn of the century, North Village was the center of Londonderry, with a train depot, White's Tavern, and the largest cluster of homes in Town. This plan attempts to emphasize North Village again and bring it back to its former glory when the train was running and it was a hub of activity.

This plan looks at how to expand the historic village in a way that reflects what might have organically happened if the area had continued to grow. The plan honors the great historic buildings that remain and provide an opportunity for new buildings to generate new vitality to help revitalize the neighborhood.

The plan capitalizes on the underutilized industrial buildings and the towering smoke stack that provide a point of visual interest within the village. A collection of smaller complementary buildings are carefully stitched into the fabric of the existing warehouse structures along Mammoth Road to create a rich mix of activity and an interesting series of outdoor spaces enclosed by these new and old buildings. This kind of space would be ideal centered on the creative economy and on production of value-added agricultural products.







NORTH VILLAGE ARTISAN DISTRICT

1 NEIGHBORHOOD EXPANSION

Currently, the neighborhood street network in the North Village is largely the same as it was in 1900. This plan illustrates how the neighborhood can be expanded in a way that respects the existing character of the village by extending the traditional street grid. Homes are located close to the front right of way and set parallel to the street. New residents would be within walking distance of local shop, the rail trail, and North Londonderry Elementary School.



Complete a formal study of the local street network to evaluate the feasibility of neighborhood expansion in this area. Develop zoning regulations that emphasize building form and community character.



Community Development Department
Public Works Department

3 RAIL TRAIL

The rail trail is an incredible untapped asset within Londonderry. This plan envisions a completed multi-use trail, for walking, cycling, and horseback riding. The design of the trail would change in character as it moves from nature into the urban environment, setting up this cool moment where you slow down and notice the dramatic change in scenery and buzz of human activity. The rail trail provides an important connection from the residential neighborhoods east of Rockingham Road with North Londonderry Elementary School.



Continue fundraising campaign to build the rail-trail, beginning work soon on a preliminary engineering study.



Londonderry Trailways Committee
Community Development Department

2 ARTISAN INFILL

Currently, an historic mill building with a distinctive smoke stack and some shed style industrial buildings occupy this site. The existing buildings have a rough and gritty appearance, characteristic of spaces that are popular for loft style living and artisan industrial work space. Twenty to thirty year olds are flocking to these kinds of rehabilitated mill buildings, presenting an opportunity for Londonderry to attract this missing demographic.

The plan shows the historic structures and complementary new buildings, carefully stitched together, creating a rich mix of activity and an interesting series of outdoor spaces enclosed by these new and old buildings.

It is anticipated that the buildings would accommodate a mix of uses, geared toward the creative class, entrepreneurs, and artisans. Small street level workshops would spill out in the streets, alleys, and rail trail. Larger buildings could be used for value-added production of local agricultural products. Loft-style housing and offices could be located on upper floors. An indoor or outdoor farmer's market could be located here as well.



Develop zoning regulations that emphasize building form and a mix of uses.



Community Development Department

4 INTERSECTION REDESIGN

The intersection of Rockingham Road and Sanborn Road will need to be improved to accommodate increased foot traffic from residential neighborhoods to the North Londonderry Elementary School. Currently this road is a limited-access high speed arterial that connects Londonderry to Manchester and the airport. Understanding that traffic flow needs to be maintained, a modified round-about, or turbine intersection, will slow traffic, and only stop flow when a pedestrian needs to cross the street. Pedestrians and cyclists would use the rail trail to cross the intersection, which is aligned to provide a pedestrian refuge in the center of the turbine.



Coordinate with the New Hampshire Department of Transportation to program recommended improvements at this location.



Public Works Department



NEXT PAGE

5 SCHOOL EXPANSION

The plan provides for expansion of the North Londonderry Elementary School with additional buildings to accommodate future growth. A small garden plot is integrated into the landscape to provide an opportunity for kids to grow their own food. Stronger connections are also made with the rail trail.



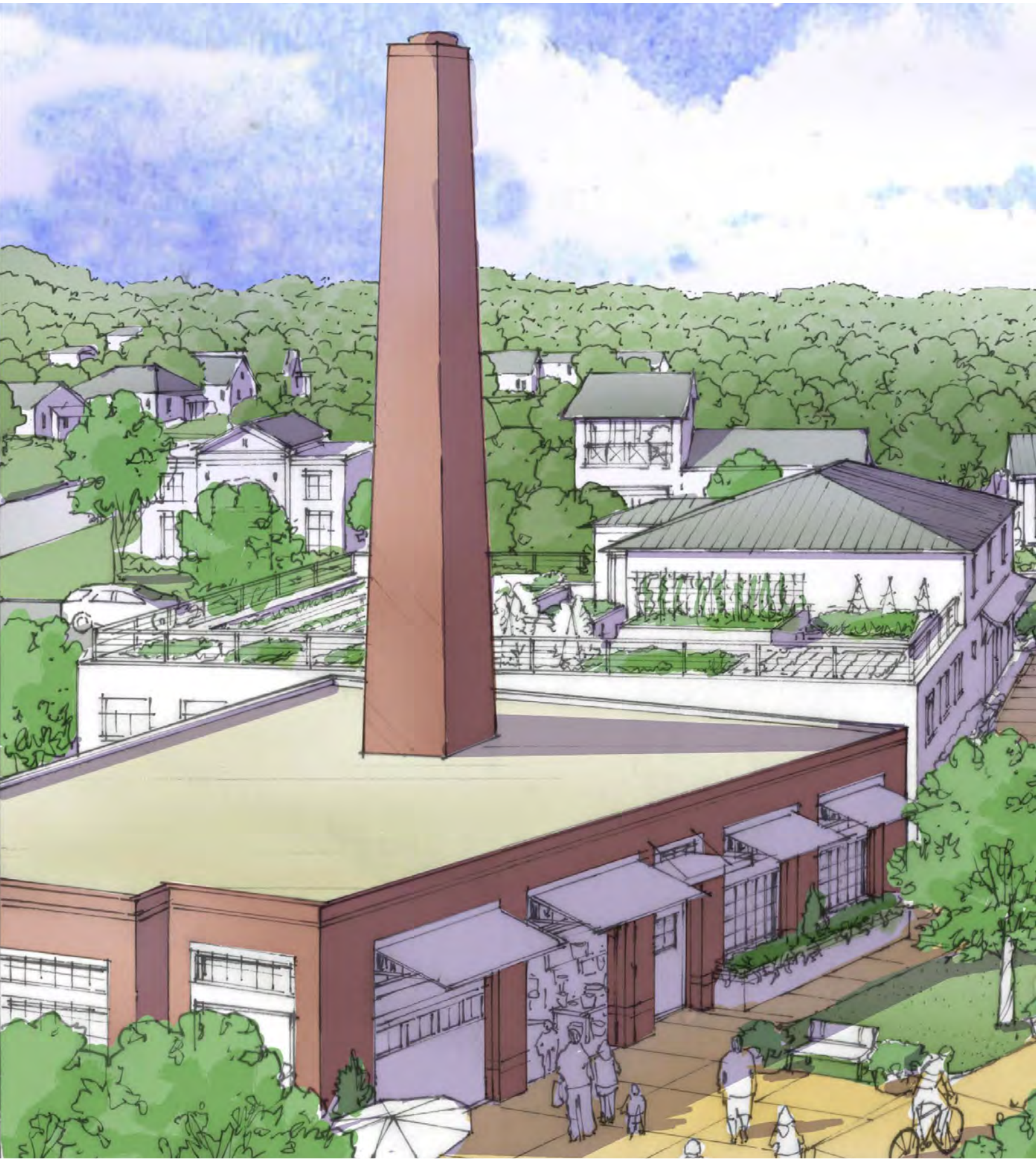
Program improvements to North Londonderry Elementary School in the School District's Capital Improvements Program.



Town Council
Londonderry School District

This bird's eye view is looking east from the interior of the artisan industrial site, looking toward Mammoth Road. The mill building has been rehabilitated with large rolling doors that, when open, provide views of people working and making things. Cafe tables and other activity spills out onto the rail trail, which opens into a broad paved plaza in the interior of this artisan industrial center. A new industrial style building sits in the middle of the space, which might function as a market building or processing facility for making value-added products from local agriculture, in this case apples. Roof top decks and gardens provide funky exterior spaces for creative types and an opportunity for residents to grow their own food.

Along the opposite side of Mammoth Road, new homes tucked into the trees line the street, in the Londonderry way of keeping things green.







SOUTH VILLAGE

Suburban Retrofit

Currently this site is dominated by suburban big box stores, strip centers, and isolated apartment buildings. It captures local customers and residents because of its convenient location, but does not entice visitors to spend much time there. However further development in the right form can transform this gateway into Londonderry and really create a sense of place around the intersection of Route 102 and Mammoth Road.

Physically changing the appearance and functionality of Route 102, by implementing the boulevard and locating buildings close to the roads, signals through traffic of the change in environment which slows traffic. The new block system is strategically located to use as much existing infrastructure, ROWs, and existing property lines as possible to physically connect existing and new buildings with a street network. This network serves not only vehicular traffic but also provides safe sidewalks for pedestrians connecting residential, commercial, recreational, and agriculture. Since this area links the Town with the Highway and serves as the “catch-all” for most daily needs, the economic success of the Town depends on the development of this corridor.


When viewing this plan, it is important to remember that these ideas and suggestions may and most likely will be phased incrementally over time. Instead of following the plan exactly, use it to have a holistic vision and ultimate goal. From this, decisions can be made to ensure that the Town will eventually develop South Village according to this vision. Although road paths may change over the years as governing bodies change, the destination stays the same.




SOUTH VILLAGE SUBURBAN RETROFIT

1 IMPROVED INTERSECTION

Currently, this intersection is oversized. The plan shows a solution for defining the street with buildings pulled closer to the new boulevard, including a new hotel. New civic plazas and greens have been added to emphasize the importance of this location.

 Amend zoning regulations for the Performance Overlay District – Route 102 Corridor to reduce emphasize form along the Nashua Road Corridor.

 Community Development Department

3 ALIGN TO DEFINE


The existing and seemingly arbitrarily located apartments to the South are now aligned to define the block edges and create a well-defined streetscape. The interior of this block can contain community gardens, parks, playgrounds, or community open space.


 Promote redevelopment of the existing apartment complex through policy incentives, waiver certain development fees, expedited plan review, etc. Reach out to the property owner to gauge interest for moving forward with the redevelopment project.

 Planning & Economic Development Department
Community Development Department
Private Developer

2 SUBURBAN RETROFIT


An existing In-Line Sprawl shopping center is “turned inside-out” to define blocks, create walkable streets, and bring buildings up to the back of the sidewalk to create an activated pedestrian environment. A large grocery store footprint is accommodated in the program.

 Amend zoning regulations to promote good form in the overlay district.

 Community Development Department

4 ROUTE 102 BOULEVARD


In this area, Route 102 becomes a multi-way boulevard for four blocks. Its success depends on adding more activity along the corridor, which will allow for future transit opportunities.


 Apply the Town’s new complete streets policy to make the street more walkable and ready for future fixed-route bus service.

 Community Development Department
Public Works Department

5 HISTORIC REUSE

The Coach Stop Restaurant is preserved and integrated with the urban fabric.

 Make the Coach Stop Restaurant a focal point for any new development at the intersection.

 Community Development Department
Historic District Commission



6 TOWN PARK

This open space is made into a proper civic space and neighborhood park, surrounded with uses that activate the space by increasing the accessibility of this parcel.



Support construction of a new park in the location that becomes the civic space for activating this quadrant of the activity center.



Community Development Department





This bird's eye view is looking east across the Route 102 and Mammoth Road intersection. Notice the addition of the greens and boulevard defined by new buildings and the sense of place that they create. This plan accommodates parking midblock for the commercial buildings that line the streets. In the distance one can see the creative alteration of a dead end circle into a defined place and through-street.



community facilities & services

The master plan for Londonderry was imagined by the citizens. It is the guiding vision for the future and the physical manifestation of the the tools generated through this process to address the Town's needs and strengthen the municipal advantage. The plan is a flexible framework and reflects one potential outcome for the future based on the project's timeless principles and community aspirations.

The information that follows summarizes how community facilities and services should be organized to support implementation of the vision plan. A brief narrative for each topic area identifies issues or projects important to the plan's recommendations.

Transportation

Several improvements to the transportation system will be needed to keep pace with build-out of the vision plan. The emphasis for improving the system is to:

- Expand and improve existing infrastructure
- Shift away from over reliance on the automobile for daily travel needs, and
- Implement a town-wide complete streets policy.

Together, these emphasis areas should improve mobility, reduce congestion, and provide greater travel mode choice for residents in future years.

A brief summary of key transportation projects and initiatives recommended for the town follows.

Street Network

Maintain Two-Lane Street Network

Town officials should continue their resistance to widening entire street segments in the study area; focusing instead on maintaining the grid street system to diffuse traffic, a complete streets policy to encourage other modes of travel, and building more walkable, mixed-use activity centers that

capture trips before they reach the major street network.

The Town did designate the Pettigrew-Harvey-Grenier Field-Rockingham Road Corridor as the preferred route between Interstate 93, the Manchester-Boston Regional Airport, and points west of the Merrimack River (i.e., the cross-town connector). It could be widened to four lanes; however, preliminary analysis of the corridor for the comprehensive master plan finds only a limited amount of widening may be necessary (especially near major intersections) to accommodate expected traffic volumes. This should be the policy of the Town until a detailed engineering analysis can be completed in coordination with the New Hampshire Department of Transportation and Southern New Hampshire Regional Planning Commission.

Build New Complete Streets

The extension of Pettengill Road between Industrial Drive and Raymond Weiczorek Drive will increase mobility and serve new development anticipated for the industrial village area. Town officials should work with representatives for the New Hampshire Department of Transportation and Southern New Hampshire Regional Planning Commission to include construction of this major thoroughfare in their adopted plans and work programs.

Major Intersection Improvements

Town officials should generally advocate for limited capacity improvements at major intersections as one means to discourage regional pass-through

traffic in the study area. Specific hot-spot intersection locations identified for improvement during a preliminary analysis for the comprehensive master plan include:

1. Pillsbury Road at Gilcrest Road

This is an offset intersection that experiences a.m. and p.m. peak hour delays. The proposed long-term solution is the construction of two single-lane roundabouts. The southern roundabout would include a right-turn bypass lane from Gilcrest Road (northbound) to Pillsbury Road (eastbound). In the interim, the two intersections could be reconfigured for stop control with signs placed to stop traffic on Gilcrest Road (southbound at both locations) and Pillsbury Road (eastbound and westbound).

2. Sanborn Road at Rockingham Road

Proposed development in the vicinity of this intersection calls for a rural village street section; promoting greater connectivity and walkability along Sanborn Road and Rockingham Road. The proposed reconfiguration of the intersection is for a turbine treatment, which generally is a modified roundabout. The turbine design will manage travel speeds on Rockingham Road while maximizing safety and comfort for pedestrian crossings.

3. Grenier Field Road at Mammoth Road

Future traffic volumes are expected to increase at this location with designation of the Pettigrew-Harvey-Grenier Field-Rockingham Road Corridor as the preferred route between Interstate 93, the Manchester-Boston Regional Airport, and points west of the Merrimack River (i.e., the cross-

town connector). A new signalized intersection with added eastbound right and westbound left turn lanes on Grenier Field Road should improve intersection performance based on project traffic volumes.

4. Fire Station Emergency Signal at Grenier Field Road

Increasing traffic volumes on Grenier Field Road will exacerbate already difficult conditions for emergency vehicles existing Fire Station One. A new emergency traffic signal is proposed at this location.

5. Harvey Road at Grenier Field Road

Future traffic volumes are expected to increase at this location with designation of the Pettigrew-Harvey-Grenier Field-Rockingham Road Corridor as the preferred route between Interstate 93, the Manchester-Boston Regional Airport, and points west of the Merrimack River (i.e., the cross-town connector). The proposed solution is for a double-lane roundabout at the Webster Road and Grenier Field intersection, and conversion of Harvey Road to two-way traffic between Webster Road and Grenier Field Road. Webster Road will need to be widened to four lanes between Harvey and Grenier Field Roads to support proposed turning movements.

Town officials should work with the New Hampshire Department of Transportation and Southern New Hampshire Regional Planning Commission to complete more detailed engineering analyses required before implementing the recommended improvements.

Bicycle & Pedestrian Facilities

The Town of Londonderry should provide a safe, convenient, continuous, comfortable and aesthetically pleasing transportation system that promotes bicycling and walking as legitimate alternatives to the automobile for trips less than one mile in length. Specific recommendations for pedestrian and bicycle facilities in town are summarized below and on the map on page 175.

Pedestrian Facilities

The recommended pedestrian network for Londonderry relies on the expanding trail system in the short-term, and both new activity centers represented in the vision plan and implementation of a complete streets policy to meet residents' long-term demand for a more walkable community. Slowing traffic, narrowing streets to reduce pedestrian crossing distance, adding on-street parking, and including better signage, crosswalks, and signal phasing for pedestrians will also make corridors within or leading to new activity centers more walkable.

Bicycle Facilities

The recommended bicycle network for Londonderry relies on designated bicycle routes on local streets and off-street, shared-use trails. Way-finding signage and pavement markings should be used throughout the proposed system to clearly designate bicycle routes and reinforce the presence of bicyclists in the travel realm. Off-street portions of the network should be designed to work with inter-mixed pedestrian or equestrian activity. Funding for missing links in the network could come from grants or donations; including the Federal Safe Routes to School Program or Transportation Enhancement Funds.

Local Transit Circulator

A town transit circulator service (small bus) would connect key destinations internal to Londonderry using a continuous loop route with short headways. Destinations along the route may include the town commons and school campus, new and emerging mixed-use activity centers, the senior center, and the park-and-ride lot at Nashua Road for service via the Boston Express. Specific stops along the route could also provide transfers to service provided by the Cooperative Alliance for Regional Transportation (CART) and Manchester Transit Authority (MTA).

A transit circulator feasibility study should be completed for the study area to confirm when demand for such a service would be high, and establish appropriate service parameters (i.e., technology, route, headways, etc.) and cost estimates for implementing the preferred system.

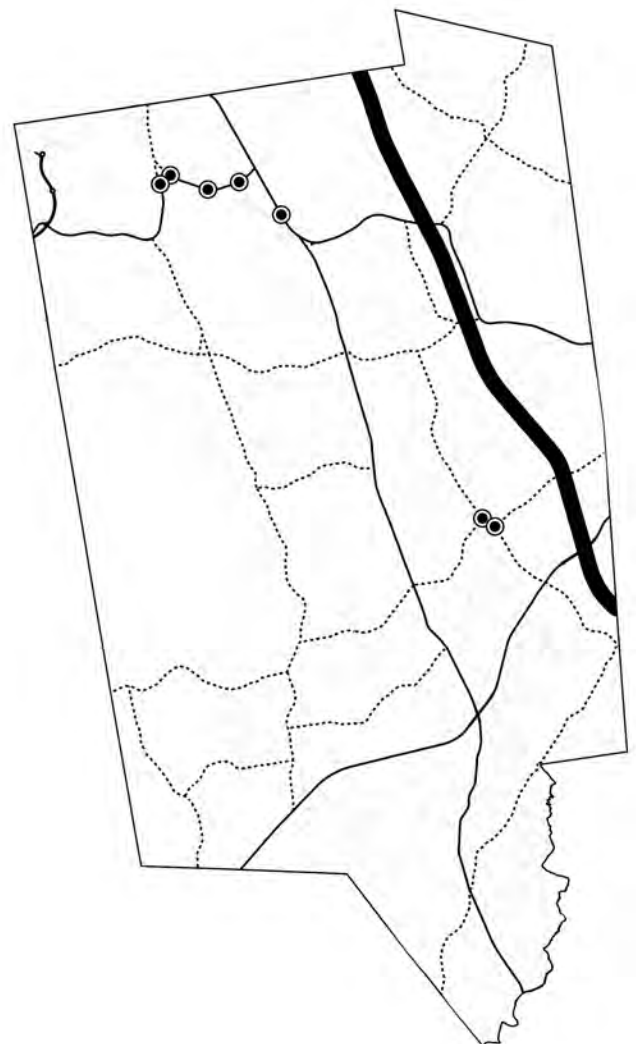
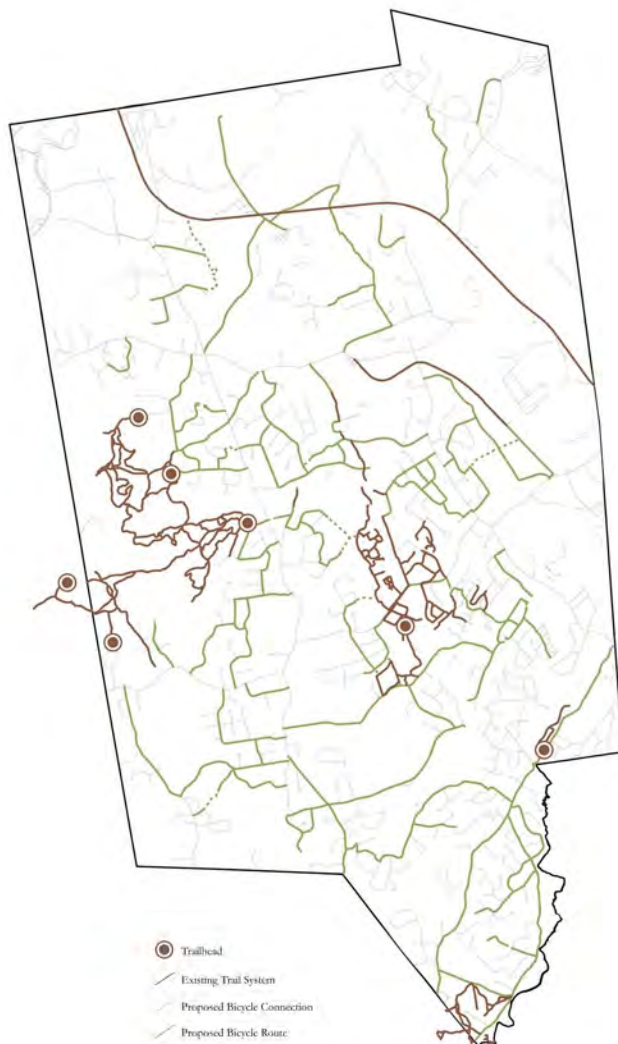
In addition, new rules and standards should be considered for the Town's zoning and subdivision ordinances that would include specific use, density, and design elements to reinforce safe and efficient transit service between major activity centers (i.e. follow transit-oriented development principles). Some service contemplated for the new activity centers should run internal to the site, which would support a major transit node and surrounding development.

Water & Sewer Service

Londonderry will continue to depend on surrounding water and sewer utility providers to extend bulk water or sewer treatment services to new residents and businesses. The vision plan assumes adequate services will be provided concurrent with the development of new activity centers, either by public investment or developer financing and construction. Town officials should coordinate with utility providers operating in town to en-

sure adequate capacity is reserved for the magnitude and timing of future development anticipated in the comprehensive master plan.

Town officials should also plan for the expansion of its sewer collection and interceptor system to keep up with demand. This includes regular updates to the Londonderry Wastewater Facilities Plan, and targeted capital improvements to maintain system integrity and expand service.



Green Print Initiative

The green print represents an interconnected network of green space in town that conserves natural areas and helps determine an identity and sense of place for the community. It includes areas identified either for preservation and reservation in the vision plan. Preserved areas include water bodies, wetlands, and land purchased for permanent conservation. Reserved areas include floodplains, steep slope areas, working farms, town parks, land subject to the town's conservation overlay district, and other natural areas identified for protection by the Londonderry Conservation Commission, Open Space Task Force. Forested areas, while not formally included in the green print, were recognized for their positive contribution to the green vibe in town. Town officials should prepare a tree preservation and buffer ordinance for protecting mature tree stands in the community as opposed to a town-wide policy in the comprehensive master plan protecting all tree stands regardless of age, species, or health of the trees therein.

Resources for building the community's green network should be proactive and benefit from a coordinated public investment; no different than other town programs created to build and maintain roads, provide sewer collection service, or support parks and recreation activities.

Landowners should consult the green print map on page 177 for guidance on preserving green spaces during development of their property. The location of dedicated open space required under the Town's zoning or subdivision ordinances should be located in a complementary manner to existing green elements depicted on the map.

Police & Fire Protection

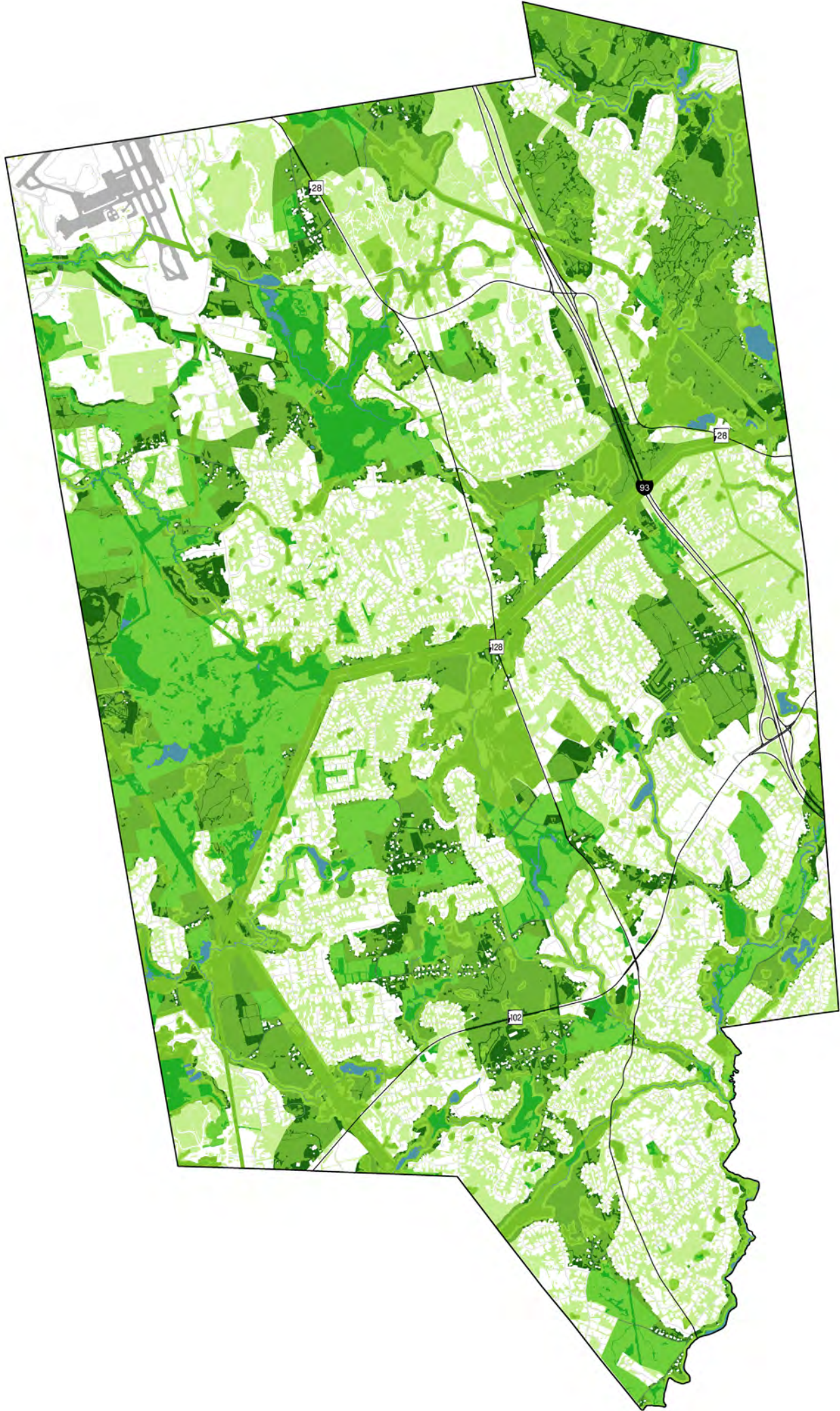
Demands for police and fire protection will continue to increase as the town grows. More equipment and personal will be needed to satisfy patrol or emergency response duties. And the concentration of new employment or population centers throughout the area could generate the demand for new police or fire stations. Some relief may be afforded by mutual aid agreements until such time that new infrastructure or personal are in place; however, the Town's position should be to invest in local police and fire services adequately to keep up with the pace of growth.

School System

Continued coordination between the Town and Londonderry School District will ensure efficient and high-quality services into the future. Specifically, the timing and location of new development influenced by the comprehensive master plan and the zoning ordinance (i.e., Section 1.4 – Growth Management & Innovative Land Use Control) should be closely coordinated with the District's strategic plan and capital investment plan.

Telephone & Electric

Disruptions to telephone and electric service seem to occur regularly in town because of the frequency and severity of natural disasters experienced in the region. Strong winds, fallen trees, and ice can all bring down overhead utility lines, causing service disruptions and expensive repairs. The comprehensive master plan advocates for the burial of overhead utilities in new development to minimize the risk for outages in the community. Furthermore, Town officials should coordinate with local utility providers to identify opportunities to bury existing utility lines.





driving success

Implementing the Town's comprehensive master plan depends on the ability of property owners, developers, Town staff, elected officials, and the general public to work together for a common purpose. The Comprehensive Master Plan should be the compass by which all decisions are measured, moving Londonderry toward the goal of becoming a more vibrant and green community.

The toolkit presented in this document provides a menu of cutting edge strategies available to help implement the vision and a master plan that ties these ideas to specific locations within the community. Action items throughout the plan section and in the supporting infrastructure section suggest steps for achieving the ideas and goals.

The action plan contained here is intended to:

1. Provide decision-makers with a blueprint for implementation.
2. Clearly define projects and action items and identify public or private investment opportunities that are achievable and reflect the vision.
3. Regularly measure achievements against the action plan enabling stakeholders to track progress and hold elected officials accountable for implementing the plan.

The structure of the action plans does not require all projects or action items be completed in sequence. Instead, it promotes flexibility and partnership opportunities between the Town and other stakeholders for implementing the vision incrementally over time, consistent with the pace of growth, emerging regional initiatives, or available funding.

The information that follows summarizes key components of the action plan.

Setting Targets

Targets in the comprehensive master plan define a desired, promised, minimum, or aspirational set of directives that drive decision-making. The targets are implemented through specific projects, plans, or initiatives recommended in the plan implementation phase; with each decision improving conditions consistent with the community's vision.

Projects, Plans, Policies, & Initiatives

New or amended projects, plans, policies, and initiatives are recommended throughout the comprehensive master plan to fulfill the community's vision for growth and quality of life. A brief summary of these items follows.

Capital Projects

Capital projects identified for the town address existing deficiencies and/or anticipated future year needs. Implementation of projects recommended in the Comprehensive Master Plan provides additional capacity to serve the magnitude and timing of development depicted on the general development map. Some of the projects listed below require coordination with responsible county or state agencies.

Town Plans & Policies

In order to implement many of the recommendations in this document, revisions need to be made to the local land use regulation code, as well as supporting policies and ordinances. Additional plans and studies for specific sites may be needed to support their implementation.

Town Initiatives

New initiatives led by the Town will address a wide range of topics important to promoting economic development and improving the quality of life for residents. These initiatives are a critical opportunity to build local capacity by involving active and new members of the community in seeing through the recommendation of the plan.

Plan Implementation Matrix

The plan implementation matrix helps policymakers and stakeholders implement the comprehensive master plan. Each project, policy, or initiative identified in the document is also listed in the matrix. A brief description, budget estimate,

funding options, timeframe, and responsible party provided for each item will help guide Town officials with implementation activities.

Many items in the matrix are underway, while others should be started with adoption of the comprehensive master plan.

Specific Plans & Initiatives

Some plans or initiatives recommended in the plan implementation matrix require additional resources to complete (e.g., a reconvened Auditorium Study Committee). The Town's Community Development Department should coordinate with other town departments to request funds and schedule special studies consistent with the time frames presented in the matrix.

Resource Allocation

With the adoption of the Comprehensive Master Plan, Town officials should allocate municipal resources with specific recommended outcomes in mind that meet the goals of the Comprehensive Master Plan. This includes funding specific projects, plans, and initiatives consistent within the timeframes presented in the implementation matrix. These expenditures are critical to advancing the vision and preparing Londonderry for a prosperous future.

Capital Improvements Plan

The Town's Capital Improvements Plan (CIP) guides future funding, schedule, and construction of capital improvements so that necessary infrastructure is in place consistent with demand. It distributes expensive projects over time, helping decision-makers coordinate improvements for greater efficiency and assess short-term financing requirements in the context of long-term fiscal needs and constraints. A well-coordinated and regularly-updated CIP document protects the community from abrupt tax increases.

Projects in the capital improvements plan should focus on short-term and long-term investments identified in the comprehensive master plan. Other projects recommended from year-to-year should 'buy results' that citizens value, measured by fulfillment of the vision and guiding principles, before being included in the CIP document.

Annual Budget

Spending for the coming year is authorized by the Town Council in an adopted annual budget. It authorizes spending, assures the budget is balanced, and levies property tax for the budget year.

The first year of the capital improvements plan should become the annual capital budget submitted concurrent with the operating budget for consideration by the Town Council. The town should also implement a five year budget strategy to allow for a more comprehensive approach to planning for future expenditures. The allocation of funding should direct resources toward specific projects detailed in the comprehensive master plan, so that results can be seen.

Community Report Card

A community report card will monitor and evaluate progress as the Town implements the recommendations in the comprehensive master plan. The report card should give a full and honest assessment of conditions in Town; and be used specifically to monitor performance, measure achievement, and reflect change generated by the plan.

Formal presentation of the document should be made to the Town Council at the first of each year. Adjustments to the plan's implementation program, if necessary, should be made in the months following the presentation.